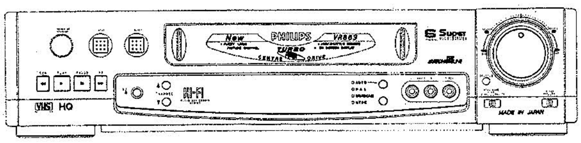
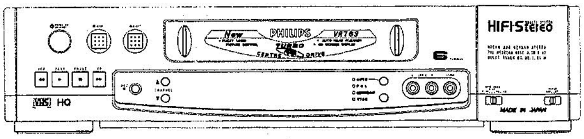
Video Cassette Recorder

VR863 /56
VR743 /75
VR763 /55/93
VR773 /93
VR663 /56
GV469M
74MV633 /02B/05B/08B/16B
74MV433 /08B

Service
Service
Service


VR743/VR863/GV469M/74MV633/74MV433


VR763/VR773/VR663

Service Manual

CONTENTS

Chapter

1 Table of contents per page
Survey of sets and PCBs
Technical data
Safety instructions
Front/rear view of the video recorder
Description of the controls
Supplementary service information
Survey of sets and features

2 Service Instructions
Servicing of SMD's
Block diagram
Wiring diagram
Survey PCB location
Disassembly procedures
Procedure for cleaning upper cylinder unit

3 Electrical Adjustment Instructions
PCB layout
Circuit diagrams

4 Cabinet exploded view
Exploded view of the tapedeck
Partslist

Survey of types:

VR743/75	6 head LP, J/S remote control
VR763/55/93	6 head LP, NICAM
VR773/93	6 head LP, J/S remote control
VR863/56	6 head LP, NICAM, J/S remote control
VR663/56	4 head LP
GV469M	6 head LP, NICAM, J/S remote control
74MV633/02B/05B/16B	6 head LP, NICAM, J/S remote control
74MV633/08B	6 head LP, J/S remote control
74MV433/08B	4 head LP, J/S remote control

Survey of versions:

/02B	PAL B/G
/05B	PAL I
/08B	PAL B/G
/16B	PAL B/G, I
/55	PAL B/G, D/K, I Secam B/G, D/K NTSC M
/56	PAL B/G, D/K, I Secam B/G, D/K NTSC M
/75	PAL B/G
/93	PAL B/G, D/K, I Secam B/G, D/K NTSC M
GV469M	PAL B/G, D/K, I Secam B/G, D/K, L/L' NTSC M

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

Survey of remote controls:

VR863, VR773	4822 218 30736
VR763, VR663	4822 218 30737
VR743	4822 218 30731
74MV633 74MV433	4822 218 30732

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2. TABLE OF CONTENTS PER PAGE

CHAPTER 1 page

1. Frontpage ---------- 1-1
2. Table of contents per page ---------- 1-2
3. Survey of sets and PCBs ---------- 1-3
4. Technical data ---------- 1-3
5. Safety instructions ---------- 1-3
6. Front/rear view of the video recorder ---------- 1-4
7. Description of the controls ---------- 1-5
8. Supplementary Service information ---------- 1-6
9. Survey of sets and features ---------- 1-7

CHAPTER 2

1. Service instructions ---------- 2-1
    1. Service test program ---------- 2-1
2. Servicing of SMD's ---------- 2-2
    1. General Cautions on handling and storage - 2-2
    2. Removal of SMD's ---------- 2-2
    3. Attachment of SMD's ---------- 2-2
3. Block diagram ---------- 2-3
4. Wiring diagram ---------- 2-5
5. Survey PCB location ---------- 2-6
6. Disassembly procedures ---------- 2-7
    1. Disassembly flow chart ---------- 2-7
    2. Disassembly method ---------- 2-7
7. Procedure for cleaning upper cylinder unit ---------- 2-9

CHAPTER 3

1. Electrical adjustment instructions ---------- 3-1
    1. Test point/Adjustment locations ---------- 3-1
    2. Test equipment ---------- 3-5
    3. Servo section ---------- 3-5
    4. Tuner timer section ---------- 3-6
    5. Audio section ---------- 3-6
    6. Luminance section ---------- 3-8
    7. NICAM section ---------- 3-9
    8. Tuner section ---------- 3-10
    9. NTSC IF section ---------- 3-11
    10. SECAM Chroma section ---------- 3-12
2. Luminance and Chrominance/Play back equalizer/Chrominance/AI picture/Secam and NTSC to PAL convertor/0.32 Skew for NTSC/On screen display/Secam detector/NTSC detector and sync detector PCB drawing (PM02) ---------- 3-14
3. Luminance and chrominance schematic diagram (VS-1) ---------- 3-17
4. Play back equalizer schematic diagram (VS-2) ---------- 3-18
5. Chrominance schematic diagram (VS-3) ---------- 3-19
6. AI picture schematic diagram (VS-4) ---------- 3-20
7. Secam and NTSC to PAL convertor schematic diagram (VS-5) ---------- 3-21
8. 0.32 skew for NTSC schematic diagram (VS-6) ---------- 3-22
9. On screen display schematic diagram (VS-7) -- 3-23
10. Secam detector schematic diagram (VS-8) ---------- 3-24
11. NTSC detector and sync detector schematic diagram (VS-9) ---------- 3-25
12. Head amp PCB drawing (PH01) ---------- 3-26
13. HI-FI head amp PCB drawing (PH02) ---------- 3-26
14. Head amp schematic diagram (HA-1) ---------- 3-27
15. HI-FI head amp schematic diagram (HA-2) ---------- 3-27
16. Servo-1/Servo-3/Timer tuning/Audio/Video selector PCB drawing (PM01) ---------- 3-28
17. Servo-2 PCB drawing (PD01) ---------- 3-28
18. Servo-1 schematic diagram (DE-1) ---------- 3-29
19. Servo-2 schematic diagram (DE-2) ---------- 3-30
20. Servo-3 schematic diagram (DE-3) ---------- 3-31
21. Timer tuning schematic diagram (TT) ---------- 3-32
22. Euro AV PCB drawing (PI01) ---------- 3-33
23. Audio/Video selector schematic diagram (IO-1) ---------- 3-33
24. Display control PCB drawing (PC01) ---------- 3-34
25. Display control schematic diagram (DC-1) ---------- 3-35
26. Display control PCB drawing (PC02) ---------- 3-36
27. Display control schematic diagram (DC-2) ---------- 3-37
28. UHF/VHF tuner/TV demodulator/HI-FI audio sub/Nicam SIF PCB drawing (PM03) ---------- 3-38
29. UHF/VHF Tuner/TV demodulator schematic diagram (FE-1) ---------- 3-39
30. 2nd. SIF/2 carrier ST/HI-FI audio sub PCB drawing (PF02) ---------- 3-40
31. 2nd. SIF/2 carrier ST schematic diagram (FE-2) ---------- 3-40
32. NTSC IF PCB drawing (PF03) ---------- 3-41
33. NTSC IF schematic diagram (FE-3) ---------- 3-41
34. HI-FI audio main PCB drawing (PF01) ---------- 3-42
35. HI-FI audio main schematic diagram (FM-1) --- 3-43
36. HI-FI audio sub schematic diagram (FM-2) ---------- 3-44
37. Front AV PCB drawing (PC06) ---------- 3-46
38. Front AV schematic diagram (IO-2) ---------- 3-47
39. Normal audio PCB drawing (PA01) ---------- 3-48
40. Normal audio schematic diagram (AD-1) ---------- 3-49
41. Nicam detector PCB drawing (PN01) ---------- 3-50
42. Nicam SIF schematic diagram (NI-1) ---------- 3-51
43. Nicam detector schematic diagram (NI-2) ---------- 3-52
44. Power supply PCB drawing (PS01) ---------- 3-54
45. Power supply schematic diagram (PS) ---------- 3-55

CHAPTER 4

1. Cabinet exploded view ---------- 4-1
2. Exploded view of the tapedeck ---------- 4-2
3. Partslist ---------- 4-4

3. SURVEY OF SETS AND PCBs

	PM01 Servo, Timer Tuning and Audio/Video Selector	PM02 Luminance and Chrominance	PM03 Tuner, HiFi Audio and NICAM SIF	PH01 Head Amplifier (MONO)	PH02 Head Amplifier (HiFi)	PC01 Display Control	PC02 Display Control	PC06 AV Front	PF01 HiFi Audio	PF02 2nd. SIF, 2car. st and HiFi Audio	PF03 NTSC IF	PD01 Servo	PI01 Euro AV	PN01 NICAM	PA01 Normal Audio	PS01 Power Supply
VR743/75	•	•	•		•	•	•	•	•	•		•				•
VR763/55	•	•	•		•	•	•	•	•	•		•		•		•
VR763/93	•	•	•		•	•	•	•	•	•		•		•		•
VR773/93	•	•	•		•	•	•	•	•	•		•				•
VR863/56	•	•	•		•	•	•	•	•	•		•		•		•
VR663/56	•	•	•	•		•	•	•				•			•	•
GV469M	•	•	•		•	•	•	•	•	•	•	•	•	•		•
74MV633/02B	•	•	•		•	•	•	•	•	•		•	•	•		•
74MV633/05B	•	•	•		•	•	•	•	•	•		•	•	•		•
74MV633/08B	•	•	•		•	•	•	•	•	•		•	•			•
74MV633/16B	•	•	•		•	•	•	•	•	•		•	•	•		•
74MV433/08B	•	•	•	•		•	•	•				•	•		•	•

4. TECHNICAL DATA (VR863/56)

Mains voltage	90V - 240V
Mains frequency	50/60 Hz
Power consumption	35W
Wind/rewind time	2min. typical for E180
Ambient temperature	+ 5°C - + 40°C
Humidity	30 -80% RH
Dimensions	435 x 93 x 300 mm
Weight	6.0kg
Position of use	max 15° indination in any direction
Video-resolution	*better than 250 lines*
Audio	80Hz - 10kHz (SP)
FM Audio	20Hz - 20kHz

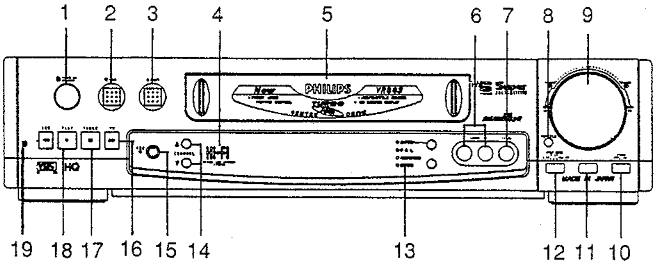
5. SAFETY INSTRUCTIONS

- Safety regulations demand that the set be restored to its original condition and that components identical with the original types be used.
  Safety components are marked by the symbol ⚠
- All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless han*dling during repair may reduce life drastically.* When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools on the same potential.
- A set to be repaired should always be connected to the mains via a suitable isolating transformer.
- Never replace any modules or any other parts while the set is switched on.
- Use plastic instead of metal alignment tools. This in order *to prelude short-circuit or to prevent a specific circuit from* being rendered unstable.

REMARKS

- The direct voltages and oscillograms ought to be measured relative to the set mass.
- The direct voltages and oscillograms mentioned in the diagrams ought to be measured with a colour bar signal.
- The oscillograms and direct voltages have been measured in RECORD or PLAY mode.
- *The semiconductors, which are mentioned in the circuit* diagram and in the parts lists, are fully exchangeable per position with the semiconductors in the set, irrespective of the type designation of these semiconductors.

6. FRONT/REAR VIEW OF THE VIDEO RECORDER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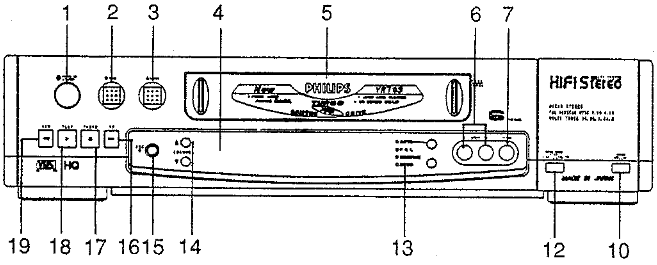
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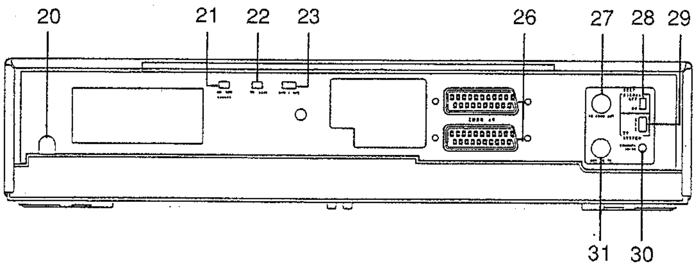
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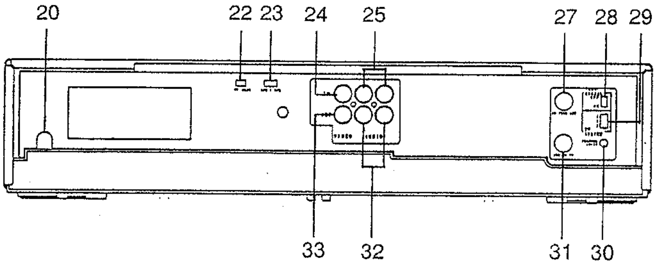
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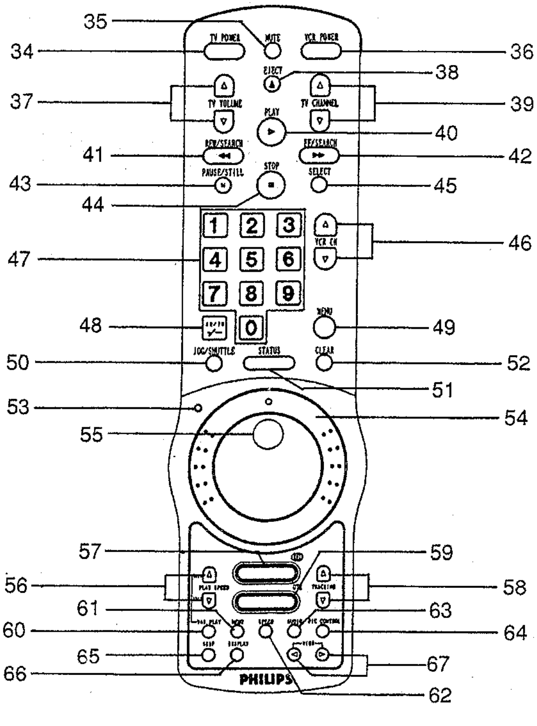
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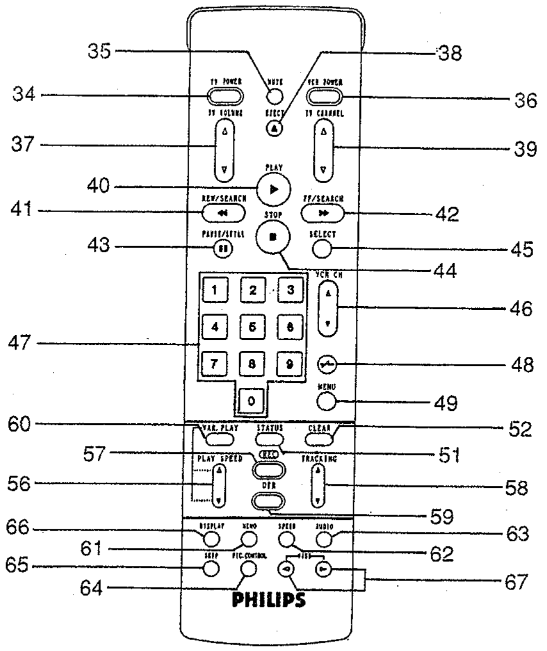
TV POWER
MUTE
VCR POWER
EJECT
TV VOLUME
TV CHANNEL
PLAY
REW/SEARCH
FF/SEARCH
PAUSE/STILL
STOP
SELECT
VCR CH
MENU
JOG/SHUTTLE
STATUS
CLEAR
PLAY SPEED
TRACKING
PHILIPS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TV POWER
MUTE
VCR POWER
EJECT
TV VOLUME
TV CHANNEL
PLAY
REW/SEARCH
FF/SEARCH
PAUSE/STILL
STOP
SELECT
VCR CH
MENU
VAR. PLAY
STATUS
CLEAR
PLAY SPEED
TRACKING
DISPLAY
AUDIO
SETUP
PIC-CONTROL
PHILIPS

7. DESCRIPTION OF THE CONTROLS

FRONT

1	⏻	VCR POWER Button
2	■	STOP button
3	⏏	EJECT button
4		Wireless Remote Sensor
5		Cassette Compartment
6		AUDIO IN(put) Jacks (L/R)
7		VIDEO IN(put) Jack
8		Shuttle Button
9		Shuttle Ring
10		NICAM ON/OFF Switch
11		MESECAM/SECAM Switch
12		NTSC MODE Switch
13		Colour Buttons and Indicators (MULTI) TRACKING Control UP/DOWN Buttons (PAL)
14		CHANNEL UP/DOWN Buttons
15	▶▶	REC(ord) Button
16	❚❚	FF (Fast Forward)/Search Button
17	▶	PAUSE Button
18	◀◀	PLAY Button
19		REW(ind)/Search Button

REAR

20	AC (Alternating Current) Power Cord
21	Canal + ON/OFF Switch
22	TV/CATV Switch
23	System Switch Ant. In.
24	VIDEO IN(put) Jack
25	AUDIO IN(put) Jacks (L/R)
26	EURO AV Connectors (21-pin type) (in/out)
27	IN FROM ANT(enna) VHF/UHF Jack
28	TEST SIGNAL ON/OFF Switch
29	TV SYSTEM Switch Ant. Out.
30	CHANNEL 30 - 39
31	OUT TO TV VHF/UHF Jack
32	AUDIO OUT(put) Jacks (L/R)
33	VIDEO OUT(put) Jack

Remote Control

34		TV POWER Button
35		MUTE Button
36		VCR POWER Button
37		TV VOLUME UP/DOWN Buttons
38	▲	EJECT Button
39		TV CHANNEL UP/DOWN Buttons
40	▶	PLAY Button
41	◀◀	REW(ind)/Search Button
42	▶▶	FF (Fast Forward)/Search Button
43	❚❚	STILL Button
44	■	STOP Button
45		SELECT Button
46		VCR CH(annel) UP/DOWN Buttons
47	0 - 9	NUMBER Buttons (0, 1, 2, 3, 4, 5, 6, 7, 8 and 9)
48	-/--	Single/Double Digit Entry Button
49		MENU Button
50		JOG/SHUTTLE Button
51		STATUS Button
52		CLEAR Button
53		Jog/Shuttle Indicator
54		Shuttle Ring
55		Jog Ring
56		PLAY SPEED UP/DOWN Buttons
57		REC(ord) Button
58		TRACKING Control UP/DOWN Buttons
59		REC (OTR=One Touch Recording) Button
60		VAR(iable) PLAY Button
61		MEMO(ry) Button
62		Tape SPEED Button
63		AUDIO Button
64		PICTURE Control Button
65		SKIP Search Button
66		DISPLAY Button
67		VISS Buttons

Remember. Only use cassettes of a well-known brand which carry the VHS logo.

VHS

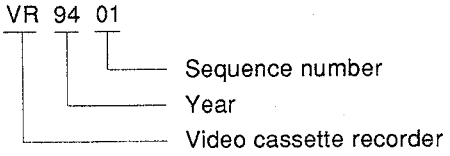
PAL NTSC

8. SUPPLEMENTARY SERVICE INFORMATION

- **Description of the system used for publishing modification data and supplements to the Service Manual.**

All modification data and supplements to the Service Manual are published by means of Service Information bulletins.
Each Service information has a number, for example:

Example:



A Service Information bulletin consists of a front sheet, as the case may be followed by supplementary and/or replacement sheets.
Replacement sheets serve to replace existing sheets in the Service Manual. These sheets are identified by an additional letter after the page number, for example 5-1a. Page 5-1a then takes the place of page 5-1.
Supplementary sheets are inserted between the existing sheets in the Service Manual. These sheets can be identified by an additional figure following the page number, for example 5-1-1.
Sheet 5-1-1 should be inserted after page 5-1.
Each Service Information is accompanied by an updated list of contents per page.
For each page added or each page replaced the list of contents indicates with which service information the relevant page has been published.

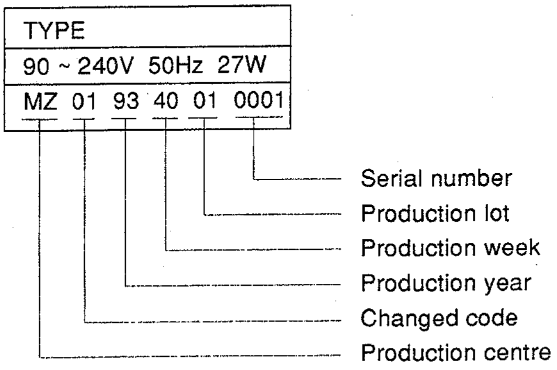
- **Description of the system by means of which modifications are indicated in the recorder.**

All important parts of the recorder, such as tape deck, p. c. boards and modules, are provided with a sticker. These stickers specify a number of product data. The meaning of this data will now be explained for the most important sections.

- The complete recorder

The type plate is located at the back of the recorder, below an example of such a type plate is given.

Type plate:



Note:
In the case of an important modification to the recorder the productionscode on the type plate is increased by one. E. g. 00 becomes 01.

9. Survey of sets and features

	VR863/56	VR763/55	VR763/93	VR773/93	VR663/56	VR743/75	74MV633/02B	74MV633/05B	74MV633/08B	74MV633/16B	74MV433/08B	GV469M
Video PAL	•	•	•	•	•	•	•	•	•	•	•	•
Secam												•
Mesecam	•	•	•	•	•							•
NTSC 3.58	•	•	•	•	•							•
NTSC 4.43	•	•	•	•	•							•
NTSC PB on PAL TV	•	•	•	•	•		•	•	•	•	•	•
Tuner PAL B/G	•	•	•	•	•	•	•		•	•	•	•
PAL D/K	•	•	•	•	•							•
PAL I	•	•	•	•	•			•		•		•
NTSC M	•	•	•	•	•							•
Secam B/G	•	•	•	•	•							•
Secam D/K, K1	•	•	•	•	•							•
2 Carrier ST	•	•				•	•		•	•		•
Nicam B/G	•	•					•			•		•
Nicam I	•		•	•				•		•		•
HiFi Stereo	•	•	•	•		•	•	•	•	•		•
Shuttle on Front	•					•	•	•	•	•	•	•
Euro AV Connector							•	•	•	•	•	•
On Screen Display	•	•	•	•	•	•	•	•	•	•	•	•
Level Meter	•	•	•	•		•	•	•	•	•		•
VISS	•	•	•	•	•	•	•	•	•	•	•	•
Timer Program 8P/1mon	•	•	•	•	•	•	•	•	•	•	•	•
One Touch Recording	•	•	•	•	•	•	•	•	•	•	•	•
HQ/Auto Tracking	•	•	•	•	•	•	•	•	•	•	•	•
Auto Head Cleaner	•	•	•	•	•	•	•	•	•	•	•	•
Skew for NTSC	•	•	•	•	•							•

1. SERVICE INSTRUCTIONS

1. 1 Service test program

This VCR has been provided with a service test program. The following lines describe what can be checked with the program and how it is activated.

A. Continuous test

This test may be used to check if the VCR with loaded cassette is working correctly.

Start procedure:
Keep FF and REW buttons pressed in simultaneously when connecting the VCR to the mains voltage.
Two different tests are available:

a) continuous PLAY.
   The VCR is brought into the continuous play/rewind mode when, prior to the start procedure, a recorded cassette is loaded into the VCR. The recorder will play the tape till its end, rewind till the beginning of the tape, go back to play and so on.
b) continuous RECORD/PLAY
   When the cassette is loaded into the VCR before the start procedure is executed and after the start procedure RECORD is pressed, the VCR will enter the record mode till the end of the tape and then go into the continuous play/rewind mode.

Note: the continuous tests are interrupted by disconnecting the VCR from the mains supply.

B. Display test

This test may be used to confirm that all elements and symbols of the multifunction display are working correctly.
Start procedure:
Keep the PLAY and REC buttons pressed in simultaneously when connecting the VCR to the mains supply. All indication leds must be ignited.

C. Initialisation of the microprocessor

This function is used to initialize (to CLEAR) the microprocessor, all the data that is stored in the RAM memory is lost.
Start procedure:
Keep PLAY and REC buttons pressed in simultaneously when connecting the VCR to the mains supply. All leds must be ignited, press CLEAR or POWER via the remote control. All data is removed from the RAM.

In case of /75, the special channels CH are stored as follows in the EEP_ROM.

PR02	ch02
PR07	ch07
PR09	ch09
PR10	ch10
PR28	ch28

In case of /93, the special channels CH (PAL-I) are stored as follows in the EEP_ROM.

PR01	ch21
PR02	ch23
PR03	ch25
PR04	ch27
PR05	ch33
PR06	ch39
PR07	ch43
PR08	ch45

(Note)
When pressing the STOP key while all digits of FL tube light, the RAM is not clear and returns back to the previous condition which an unnecessory display only is deleted.

2. SERVICING OF SMD's (SURFACE MOUTED DEVICES)

2. 1 General cautions on handling and storage.

a) Oxidation on the SMDs terminals results in poor soldering. Do not handle SMDs with bare hands.

b) Avoid for storage places that are sensitive to oxidation such as places with sulfur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity. As a result the capacitance or resistance value of the SMDs may be affected.

c) Rough handling of circuit boards containing SMDs may cause damage to the components as well as the circuit boards. Circuit boards containing SMDs should never be bent or flexed. Different circuit board materials expand and contract at different rates when heated or cooled and the components and/or solder connections may be damaged due to the stress. Never rub or scrape chip components as this may cause the value of the component to change.
Similarly, do not slide the circuit board across any surface.

2. 2 Removal of SMD's

a) Heat the solder (for 2-3 seconds) at each terminal of the chip. Small components can, by means of litz wire and a limited horizontal force, be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 1A) or

b) While holding the SMD with a pair of tweezers take it off gently using the soldering iron's heat applied to each terminal (see Fig. 1B).

c) Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 1C).

Caution on removal:

a) When handling the soldering iron, use suitable pressure and be careful.

b) When removing the chip, do not use undue force with the pair of tweezers.

c) The soldering iron to be used (approx. 30 W), must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).

d) The chip, once removed, must never be used again.

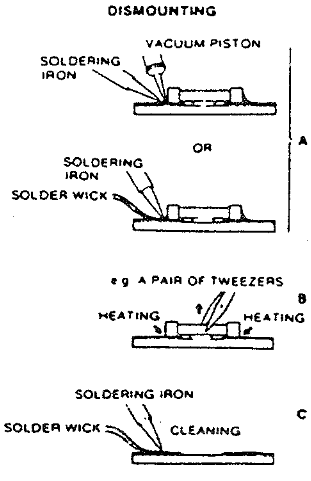

DISMOUNTING
VACUUM PISTON
SOLDERING IRON
OR
A
SOLDERING IRON
SOLDER WICK
e g A PAIR OF TWEEZERS
B
HEATING
HEATING
SOLDERING IRON
SOLDER WICK
CLEANING
C
43 767 A11

Fig. 1

2. 3 Attachment of SMD's

a) Locate the SMD on the solder lands by means of tweezers and solder the component at one side. Ensure that the component is positioned well on the solder lands (see Fig. 2A).

b) Next complete the soldering of the terminals of the component (see Fig. 2B).

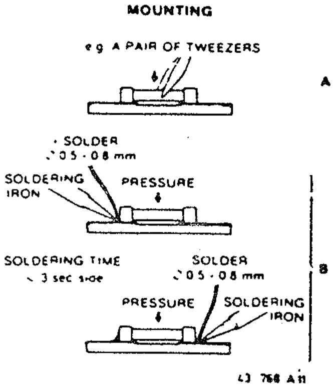

MOUNTING
e g A PAIR OF TWEEZERS
A
• SOLDER
∅ 0.5 - 0.8 mm
SOLDERING IRON
PRESSURE
SOLDERING TIME
< 3 sec side
SOLDER
∅ 0.5 - 0.8 mm
PRESSURE
SOLDERING IRON
B
43 768 A11

Fig. 2

Caution on attachment:

a) When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering must be as quick as possible; care must be taken to avoid damage to the terminals and the body itself.

b) Keep the SMD's body in contact with the printed board when soldering.

c) The soldering iron to be used (approx. 30 W) must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).

d) Soldering should not be done outside the solder land.

e) Soldering flux (of rosin) may be used but should not be acidic.

f) After soldering, let the SMD cool down gradually at room temperature.

g) The quantity of solder must be proportional with the size of the solder land. If the quantity is too great, the SMD might crack or the solder lands might be torn loose from the printed board (see Fig. 3).

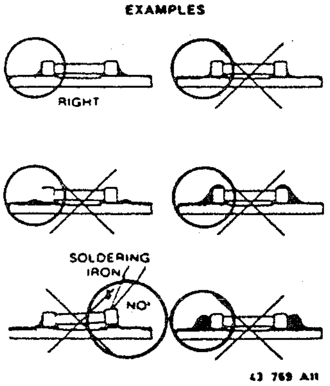
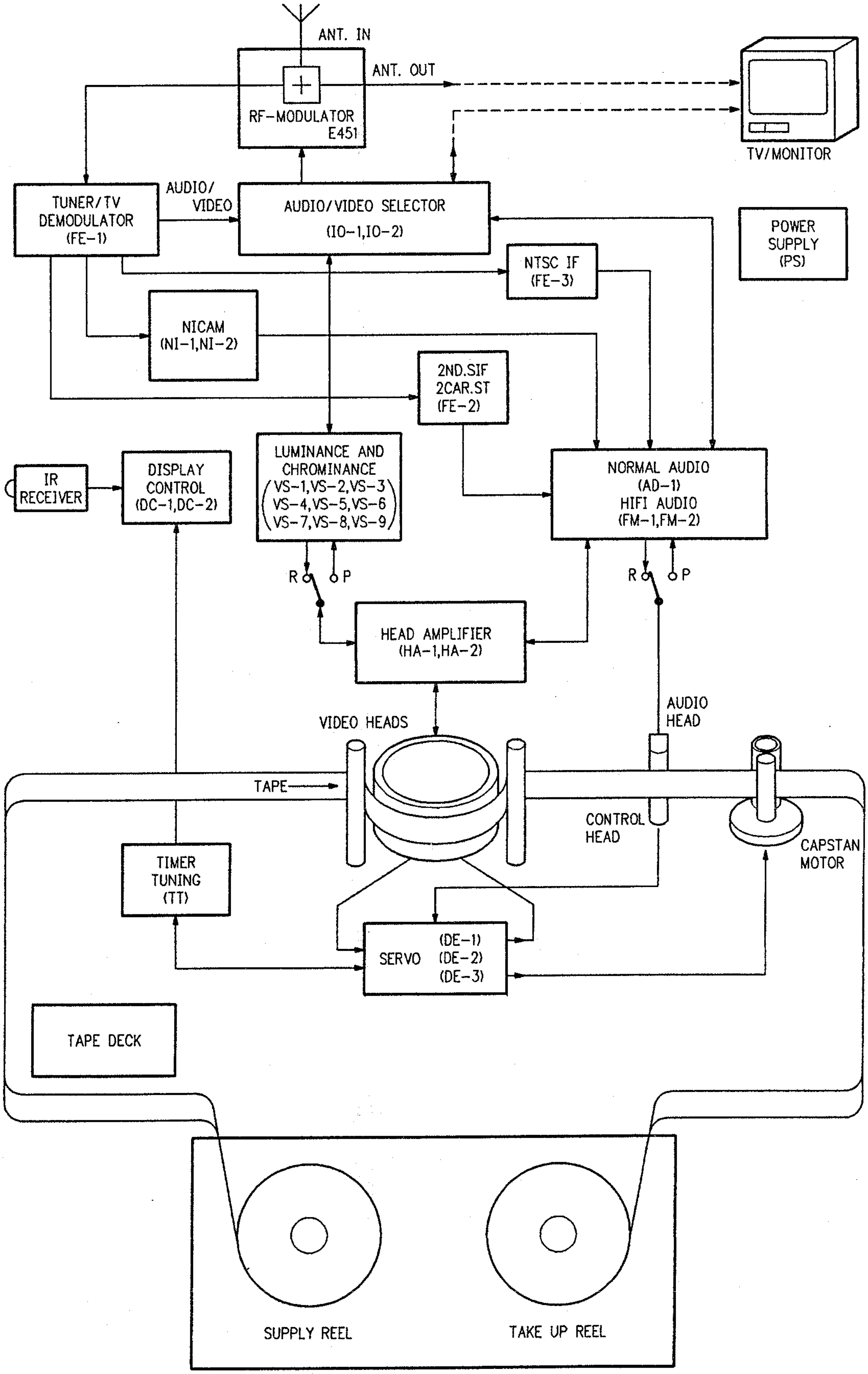
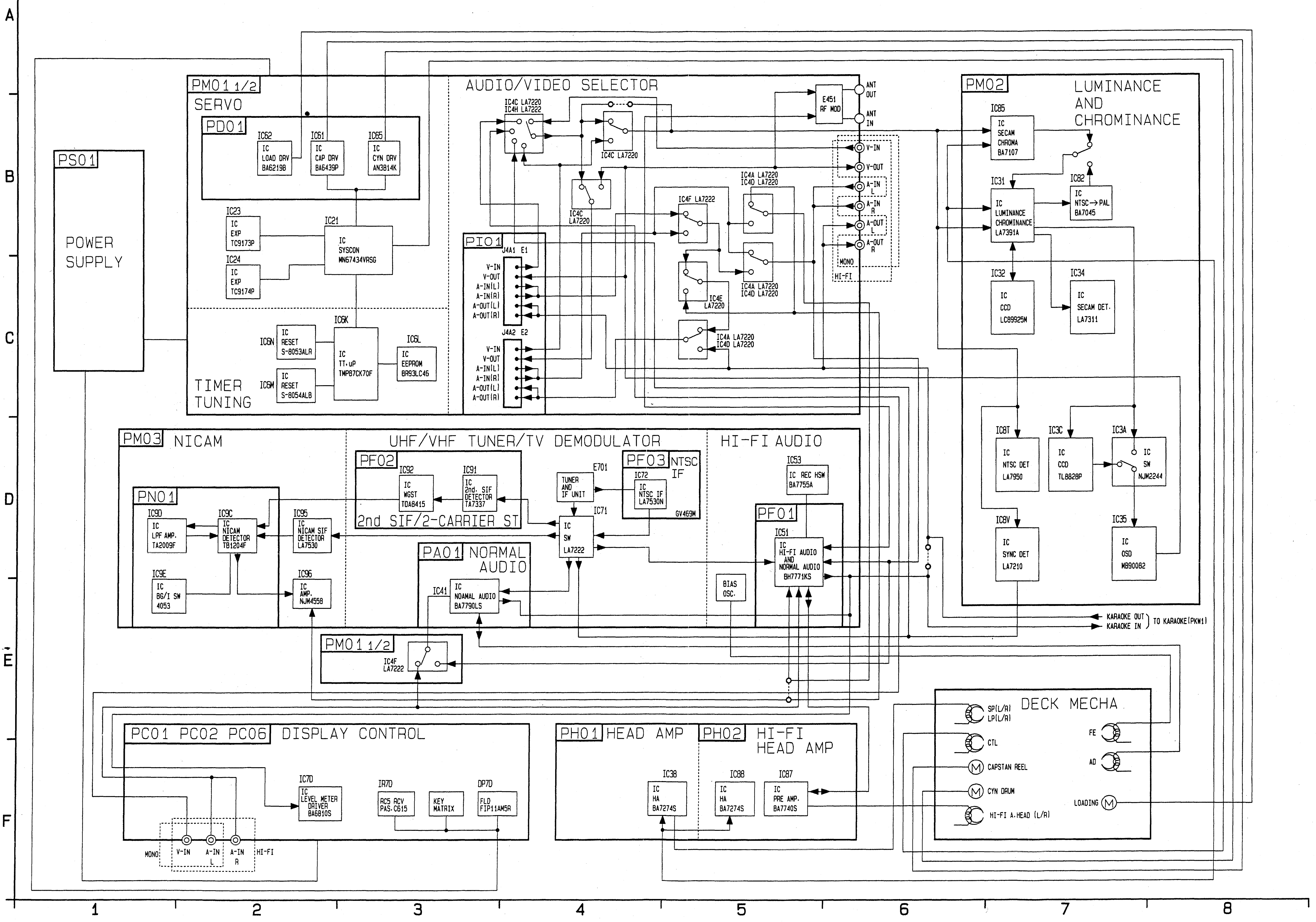

EXAMPLES
RIGHT
SOLDERING IRON
NO!
43 769 A11

Fig. 3

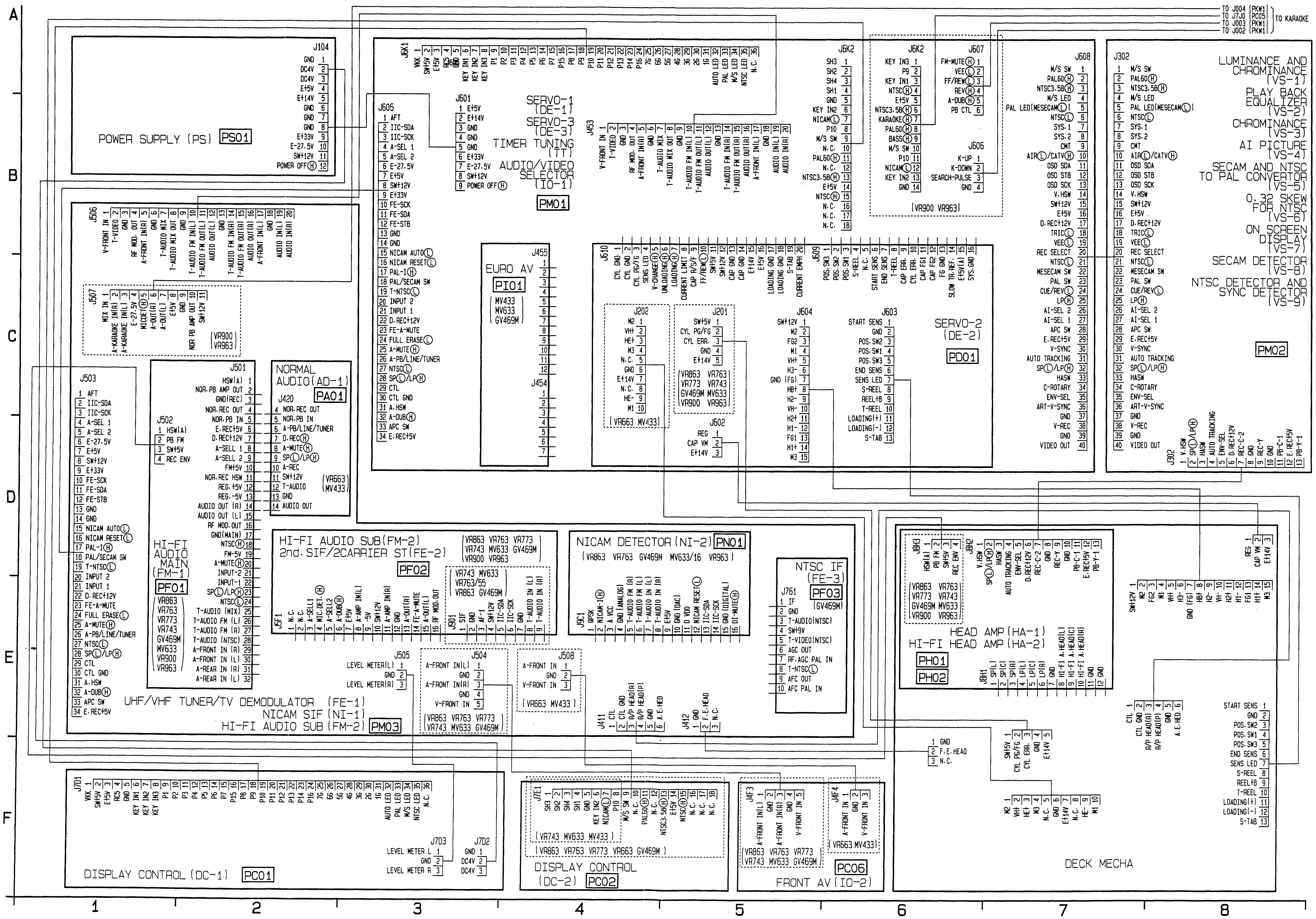
OVERALL BLOCK DIAGRAM 1


ANT. IN
ANT. OUT
RF-MODULATOR
E451
TV/MONITOR
TUNER/TV
DEMODULATOR
(FE-1)
AUDIO/
VIDEO
AUDIO/VIDEO SELECTOR
(IO-1,IO-2)
POWER
SUPPLY
(PS)
NTSC IF
(FE-3)
NICAM
(NI-1,NI-2)
2ND.SIF
2CAR.ST
(FE-2)
IR
RECEIVER
DISPLAY
CONTROL
(DC-1,DC-2)
LUMINANCE AND
CHROMINANCE
VS-1,VS-2,VS-3
VS-4,VS-5,VS-6
VS-7,VS-8,VS-9
NORMAL AUDIO
(AD-1)
HIFI AUDIO
(FM-1,FM-2)
R
P
R
P
HEAD AMPLIFIER
(HA-1,HA-2)
VIDEO HEADS
AUDIO
HEAD
TAPE
CONTROL
HEAD
CAPSTAN
MOTOR
TIMER
TUNING
(TT)
SERVO
(DE-1)
(DE-2)
(DE-3)
TAPE DECK
SUPPLY REEL
TAKE UP REEL

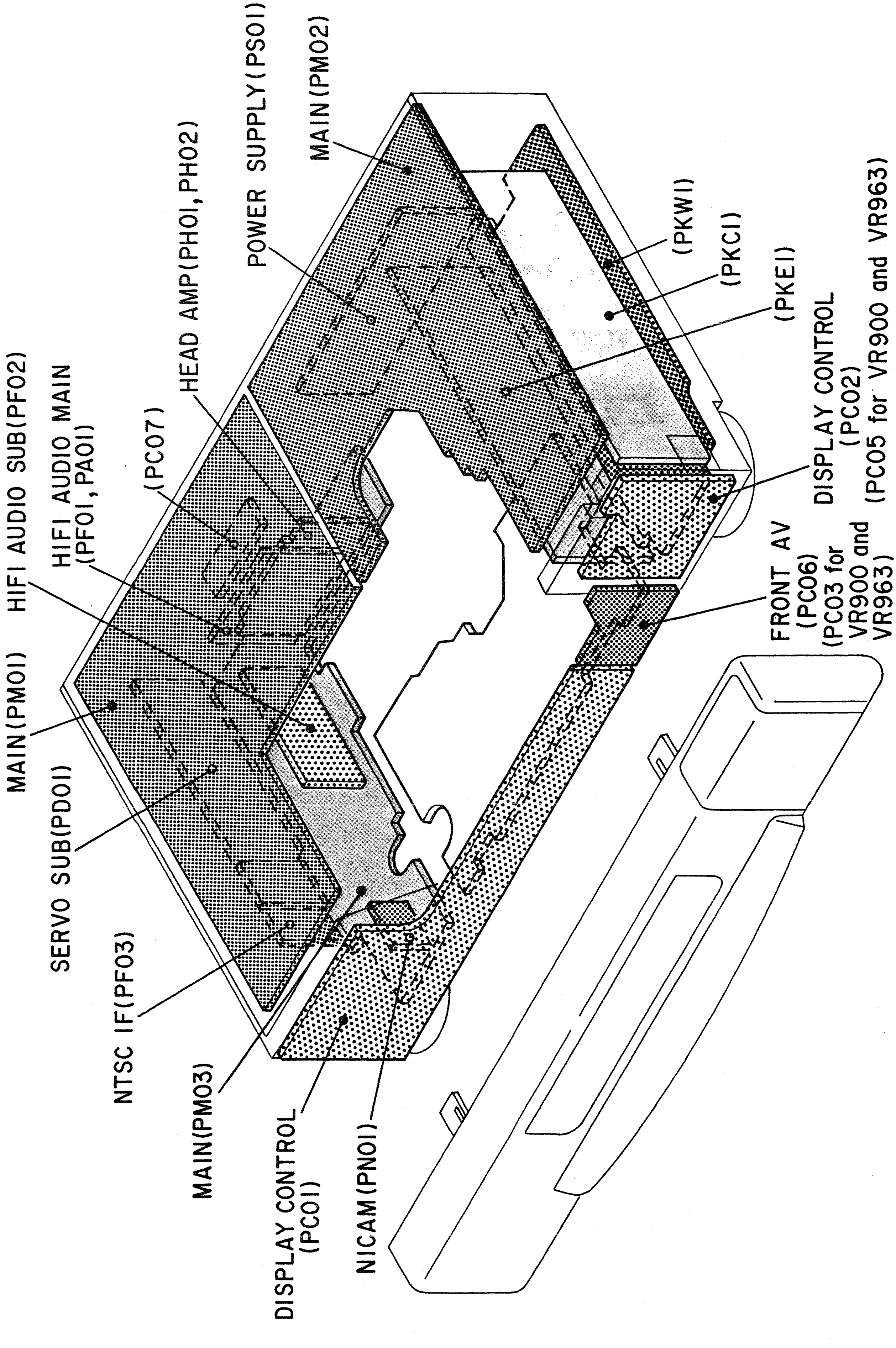
OVERALL BLOCK DIAGRAM 2


A
B
C
D
E
F
1
2
3
4
5
6
7
8
PS01
POWER SUPPLY
PM01 1/2
SERVO
PD01
IC62
IC LOAD DRV BA6219B
IC61
IC CAP DRV BA6439P
IC65
IC CYN DRV AN3814K
IC23
IC EXP TC9173P
IC24
IC EXP TC9174P
IC21
IC SYSCON MN67434VRSG
IC6K
IC TT.uP TMP87CK70F
IC6N
IC RESET S-8053ALR
IC6M
IC RESET S-8054ALB
IC6L
IC EEPROM BR93LC46
TIMER TUNING
AUDIO/VIDEO SELECTOR
IC4C LA7220
IC4H LA7222
IC4C LA7220
IC4C LA7220
PIO1
J4A1 E1
V-IN
V-OUT
A-IN(L)
A-IN(R)
A-OUT(L)
A-OUT(R)
J4A2 E2
V-IN
V-OUT
A-IN(L)
A-IN(R)
A-OUT(L)
A-OUT(R)
IC4F LA7222
IC4A LA7220
IC4D LA7220
IC4E LA7220
IC4A LA7220
IC4D LA7220
IC4A LA7220
IC4D LA7220
E451 RF MOD
ANT OUT
ANT IN
V-IN
V-OUT
A-IN L
A-IN R
A-OUT L
A-OUT R
MONO
HI-FI
PM02
LUMINANCE AND CHROMINANCE
IC85
IC SECAM CHROMA BA7107
IC31
IC LUMINANCE CHROMINANCE LA7391A
IC82
IC NTSC→PAL BA7045
IC32
IC CCD LC89925M
IC34
IC SECAM DET. LA7311
IC8T
IC NTSC DET LA7950
IC3C
IC CCD TL8828P
IC3A
IC SW NJM2244
IC8V
IC SYNC DET LA7210
IC35
IC OSD MB90082
PM03
NICAM
PN01
IC9D
IC LPF AMP. TA2009F
IC9C
IC NICAM DETECTOR TB1204F
IC9E
IC BG/I SW 4053
IC95
IC NICAM SIF DETECTOR LA7530
IC96
IC AMP. NJM4558
UHF/VHF TUNER/TV DEMODULATOR
PF02
IC92
IC WGST TDA8415
IC91
IC 2nd. SIF DETECTOR TA7337
2nd SIF/2-CARRIER ST
E701
TUNER AND IF UNIT
PF03
NTSC IF
IC72
IC NTSC IF LA7530N
GV469M
IC71
IC SW LA7222
PA01
NORMAL AUDIO
IC41
IC NOAMAL AUDIO BA7790LS
HI-FI AUDIO
IC53
IC REC HSW BA7755A
PF01
IC51
IC HI-FI AUDIO AND NORMAL AUDIO BH7771KS
BIAS OSC.
KARAOKE OUT
KARAOKE IN
TO KARAOKE(PKW1)
PM01 1/2
IC4F LA7222
PC01 PC02 PC06
DISPLAY CONTROL
IC7D
IC LEVEL METER DRIVER BA6810S
IR7D
RC5 RCV PAS.C615
KEY MATRIX
DP7D
FLD FIP11AM5R
MONO
V-IN
A-IN L
A-IN R
HI-FI
PH01
HEAD AMP
PH02
HI-FI HEAD AMP
IC38
IC HA BA7274S
IC88
IC HA BA7274S
IC87
IC PRE AMP. BA7740S
DECK MECHA
SP(L/R)
LP(L/R)
CTL
CAPSTAN REEL
CYN DRUM
HI-FI A.HEAD (L/R)
FE
AD
LOADING

WIRING DIAGRAM


TO J004 (PKW1)
TO J7J0 (PC05)
TO J003 (PKW1)
TO J002 (PKW1)
TO KARAOKE
POWER SUPPLY (PS) PS01
J104
SERVO-1 (DE-1)
SERVO-3 (DE-3)
TIMER TUNING (TT)
AUDIO/VIDEO SELECTOR (IO-1)
PM01
J6K1
J6K2
J607
J606
(VR900 VR963)
J608
J302
LUMINANCE AND CHROMINANCE (VS-1)
PLAY BACK EQUALIZER (VS-2)
CHROMINANCE (VS-3)
AI PICTURE (VS-4)
SECAM AND NTSC TO PAL CONVERTOR (VS-5)
0.32 SKEW FOR NTSC (VS-6)
ON SCREEN DISPLAY (VS-7)
SECAM DETECTOR (VS-8)
NTSC DETECTOR AND SYNC DETECTOR (VS-9)
PM02
J506
J507
(VR900 VR963)
J605
J601
J453
EURO AV PI01
(MV433 MV633 GV469M)
J455
J454
J610
J609
J202
J201
(VR663 MV433)
(VR863 VR763 VR773 VR743 GV469M MV633 VR900 VR963)
J602
J604
J603
SERVO-2 (DE-2) PD01
J503
J501
J502
NORMAL AUDIO (AD-1) PA01
J420
(VR663 MV433)
HI-FI AUDIO MAIN (FM-1) PF01
(VR863 VR763 VR773 VR743 GV469M MV633 VR900 VR963)
HI-FI AUDIO SUB (FM-2)
2nd. SIF/2CARRIER ST (FE-2) PF02
(VR863 VR763 VR773 VR743 MV633 GV469M VR900 VR963)
(VR743 MV633 VR763/55 VR863 GV469M)
J5F1
J501
NICAM DETECTOR (NI-2) PN01
(VR863 VR763 GV469M MV633/16 VR963)
J9C1
NTSC IF (FE-3) PF03 (GV469M)
J761
J505
J504
J508
(VR863 VR763 VR773 VR743 MV633 GV469M)
(VR663 MV433)
UHF/VHF TUNER/TV DEMODULATOR (FE-1)
NICAM SIF (NI-1)
HI-FI AUDIO SUB (FM-2) PM03
J411
J412
J8H3
J8H2
J8H1
(VR863 VR763 VR773 VR743 GV469M MV633 VR900 VR963)
HEAD AMP (HA-1)
HI-FI HEAD AMP (HA-2)
PH01
PH02
DECK MECHA
J7D1
J7D3
J7D2
DISPLAY CONTROL (DC-1) PC01
J7E1
(VR743 MV633 MV433)
(VR863 VR763 VR773 VR663 GV469M)
DISPLAY CONTROL (DC-2) PC02
J4F3
J4F4
(VR863 VR763 VR773 VR743 MV633 GV469M)
(VR663 MV433)
FRONT AV (IO-2) PC06
A
B
C
D
E
F
1
2
3
4
5
6
7
8

5. SURVEY PCB SECTION


MAIN(PM01)
SERVO SUB(PD01)
NTSC IF(PF03)
MAIN(PM03)
DISPLAY CONTROL
(PC01)
NICAM(PN01)
HIFI AUDIO SUB(PF02)
HIFI AUDIO MAIN
(PF01, PA01)
(PC07)
HEAD AMP(PH01, PH02)
POWER SUPPLY(PS01)
MAIN(PM02)
(PKW1)
(PKC1)
(PKE1)
DISPLAY CONTROL
(PC02)
(PC05 for VR900 and VR963)
FRONT AV
(PC06)
(PC03 for
VR900 and
VR963)

6. DISASSEMBLY PROCEDURES

1. DISASSEMBLY FLOW CHART

This flow chart indicates the proper order to be used when disassembling this unit.
This chart starts with the removal of the cabinet parts and then the order used to gain access to the PC Boards. When reassembling, perform the steps in their reverse order.

Note:

When removing the front cover and its associated PC Boards use extreme care when unlocking the plastic tabs as they may break.

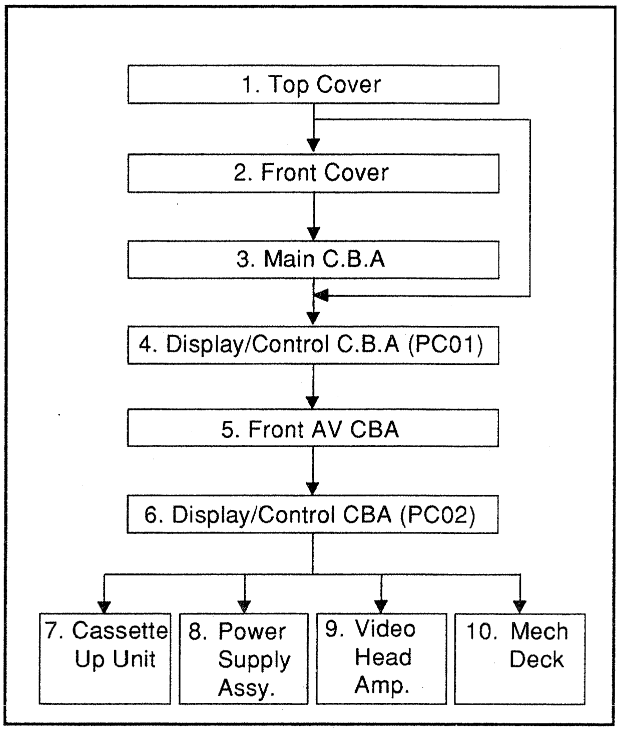

1. Top Cover
2. Front Cover
3. Main C.B.A
4. Display/Control C.B.A (PC01)
5. Front AV CBA
6. Display/Control CBA (PC02)
7. Cassette Up Unit
8. Power Supply Assy.
9. Video Head Amp.
10. Mech Deck

Fig. 1

2. DISASSEMBLY METHOD

STEP /LOC NO.	PART	REMOVAL		INSTALLATION
		FIG. NO.	REMOVE *UNPLUG/RELEASE/ UNPLUG/UNCLAMP UNSOLDER/CUT	ADJUSTMENT #CONDITION
①	Top Cover	2	2 (S-1)	<NOTE 1>
②	Front Cover	3	* 7 (L-2)	<NOTE 2>
③	Main CBA	3	4 (S-2),*2 (L-3)	<NOTE 3>
④	Display/Control CBA (PC01)	4	*4 (L-4)	<NOTE 4>
⑤	Front AV CBA	4	2(S-3)	
⑥	Display/Control CBA (PC02)	4	2 (S-4),*3(L-5)	
⑦	Cassette Up Unit	5	2 (S-5), 2 (S-6)	<NOTE 5>
⑧	Power Supply Assy.	5	(S-7)	
⑨	Video Head Amp.	5	2 (S-8)	
⑩	Mecha. Deck	5 6	3 (S-9)	

List of Abbreviations:
1 (S-1) = 2 Screws (S-1)
3 (L-1) = 3 Locking Tabs (L-1)
(B-1) = Buffer (B-1)
2 (T-1) = 2 Solder Tabs (T-1)

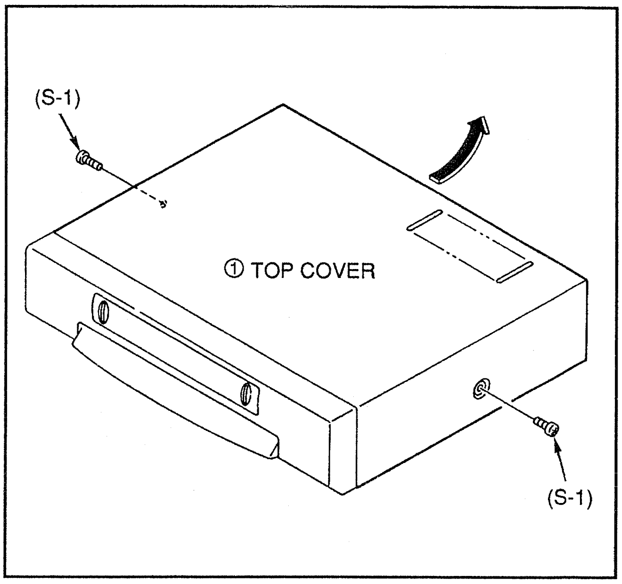

(S-1)
① TOP COVER
(S-1)

Fig. 2

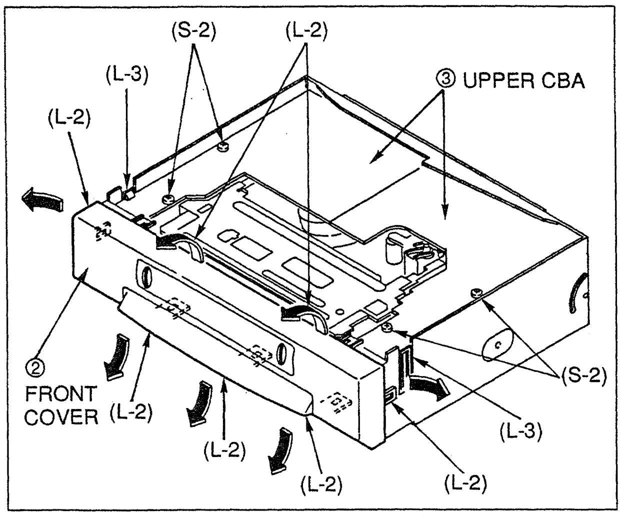

(S-2)
(L-2)
(L-3)
(L-2)
③ UPPER CBA
② FRONT COVER
(L-2)
(L-2)
(L-2)
(S-2)
(L-3)
(L-2)

Fig. 3

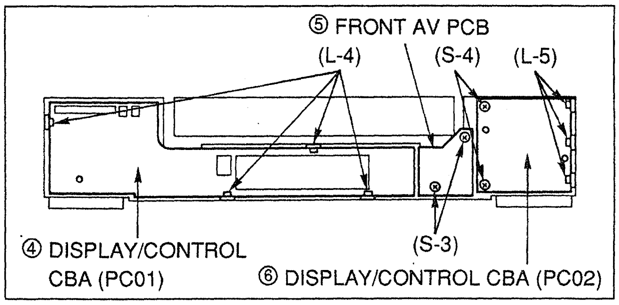

⑤ FRONT AV PCB
(L-4)
(S-4)
(L-5)
④ DISPLAY/CONTROL CBA (PC01)
(S-3)
⑥ DISPLAY/CONTROL CBA (PC02)

Fig. 4

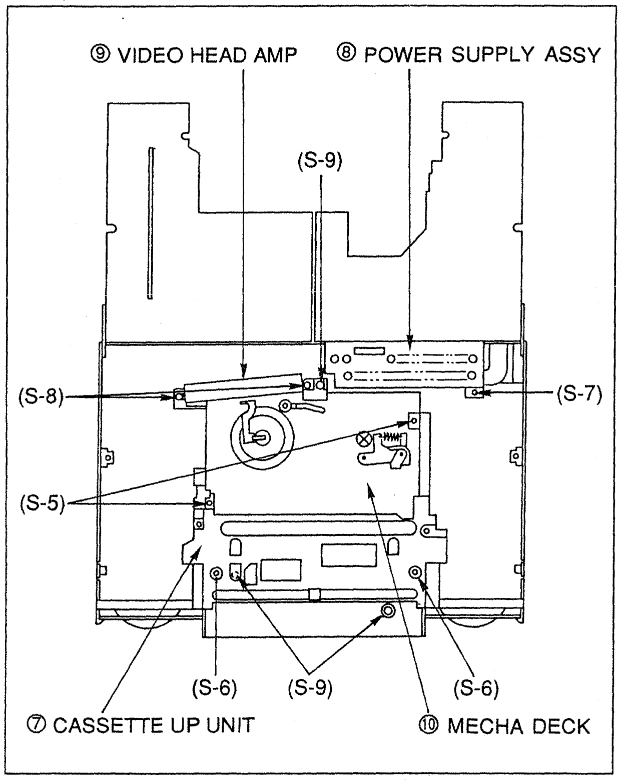

⑨ VIDEO HEAD AMP
⑧ POWER SUPPLY ASSY
(S-9)
(S-8)
(S-7)
(S-5)
(S-6)
(S-9)
(S-6)
⑦ CASSETTE UP UNIT
⑩ MECHA DECK

Fig. 5

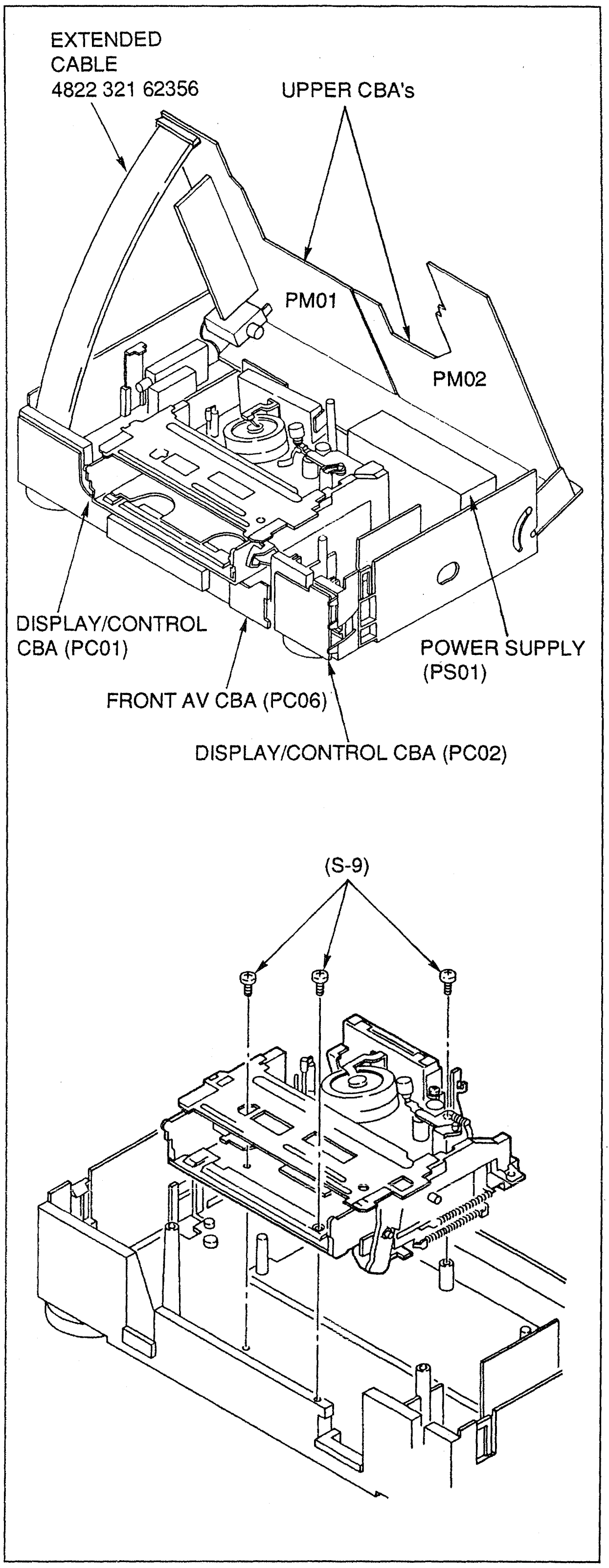

EXTENDED CABLE 4822 321 62356
UPPER CBA's
PM01
PM02
DISPLAY/CONTROL CBA (PC01)
POWER SUPPLY (PS01)
FRONT AV CBA (PC06)
DISPLAY/CONTROL CBA (PC02)
(S-9)

Fig. 6

Reference <Notes> in Chart:

1. Spread the Top Cover at the points where the two screws (S-1) were removed, enough to clear the side indentations. Then lift up while pulling back on the Top Cover to remove it.
2. Use care when unlocking the Locking Tabs on the plastic chassis.
3. Carefully lift the Upper CBA (PM-01 CBA) into the Service Position as shown in Fig. 6.
4. Display/Control CBA must be pulled out away from locating pins.
5. Removal of Cassette Up Unit.
   Remove the Cassette Up Unit by lifting it up out of the chassis.

7. PROCEDURE FOR CLEANING UPPER CYLINDER UNIT

1. Position the Video Head to permit access for cleaning. Hold the Upper Cylinder to keep it from turning while cleaning.
2. Gently rub the Video Head in the direction of tape travel with a Head Cleaning Stick (1714550020) moistened with Isopropyl Alcohol 91%.*
3. Repeat for the other Video and HI-FI Audio Heads.

***Note:**

Allow alcohol to evaporate for five minutes or clean off the excess before loading a tape.

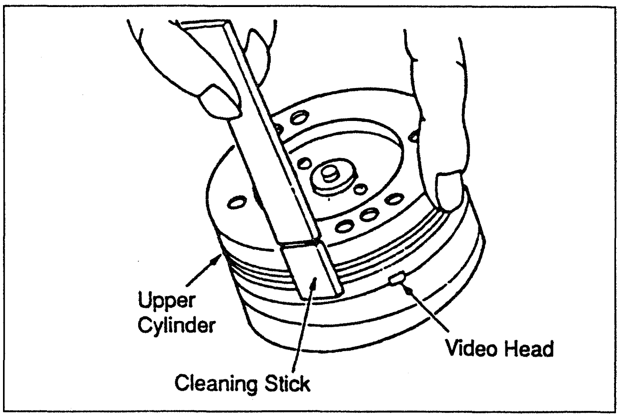


Fig. 7

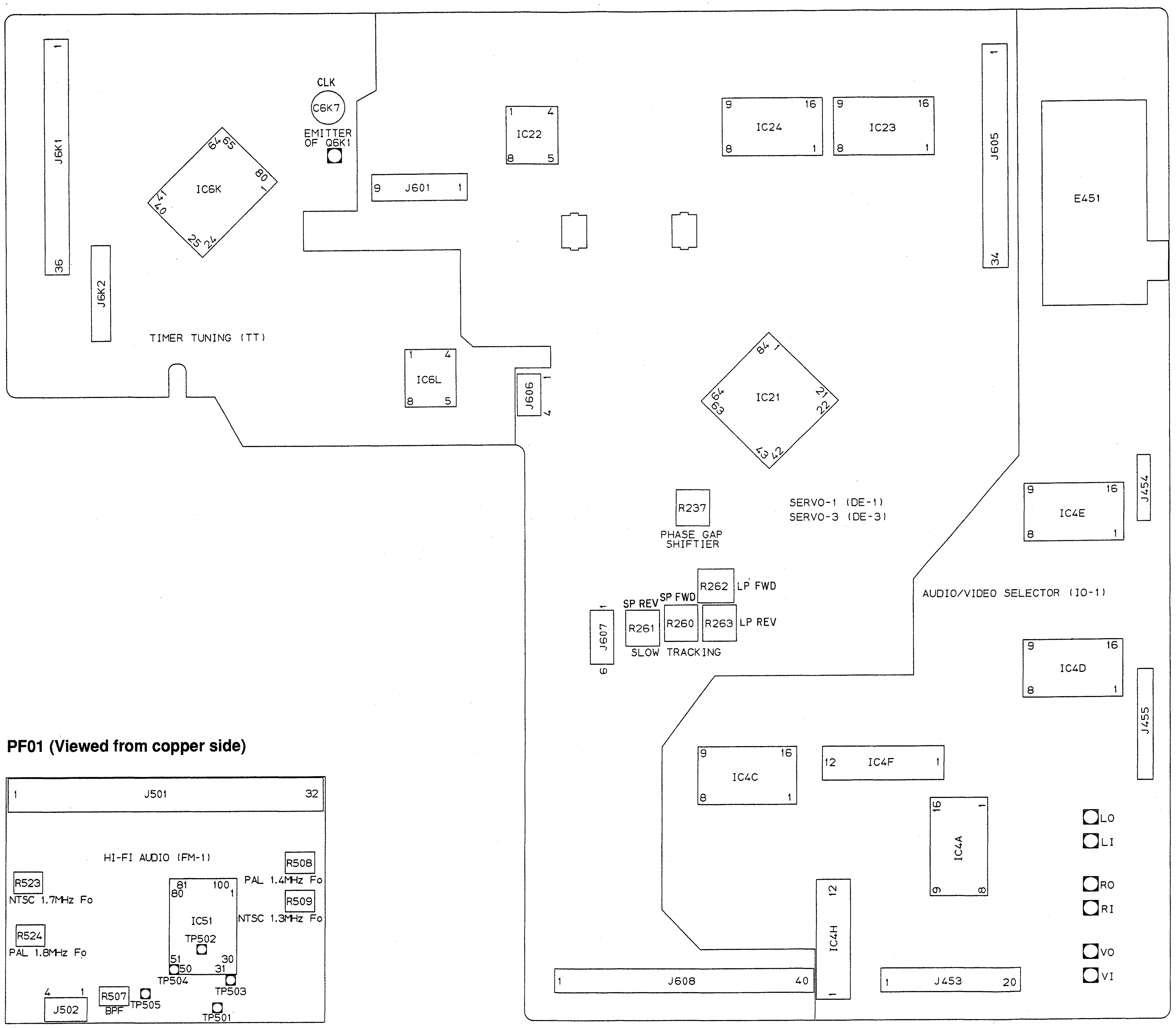
Note:

1. Do not rub vertically.
2. Do not apply any pressure to the head. If contaminant is not easily removed, continued gentle wiping will usually remove it.

1. ELECTRICAL ADJUSTMENT INSTRUCTIONS

1-1 Test Point/Adjustment Locations

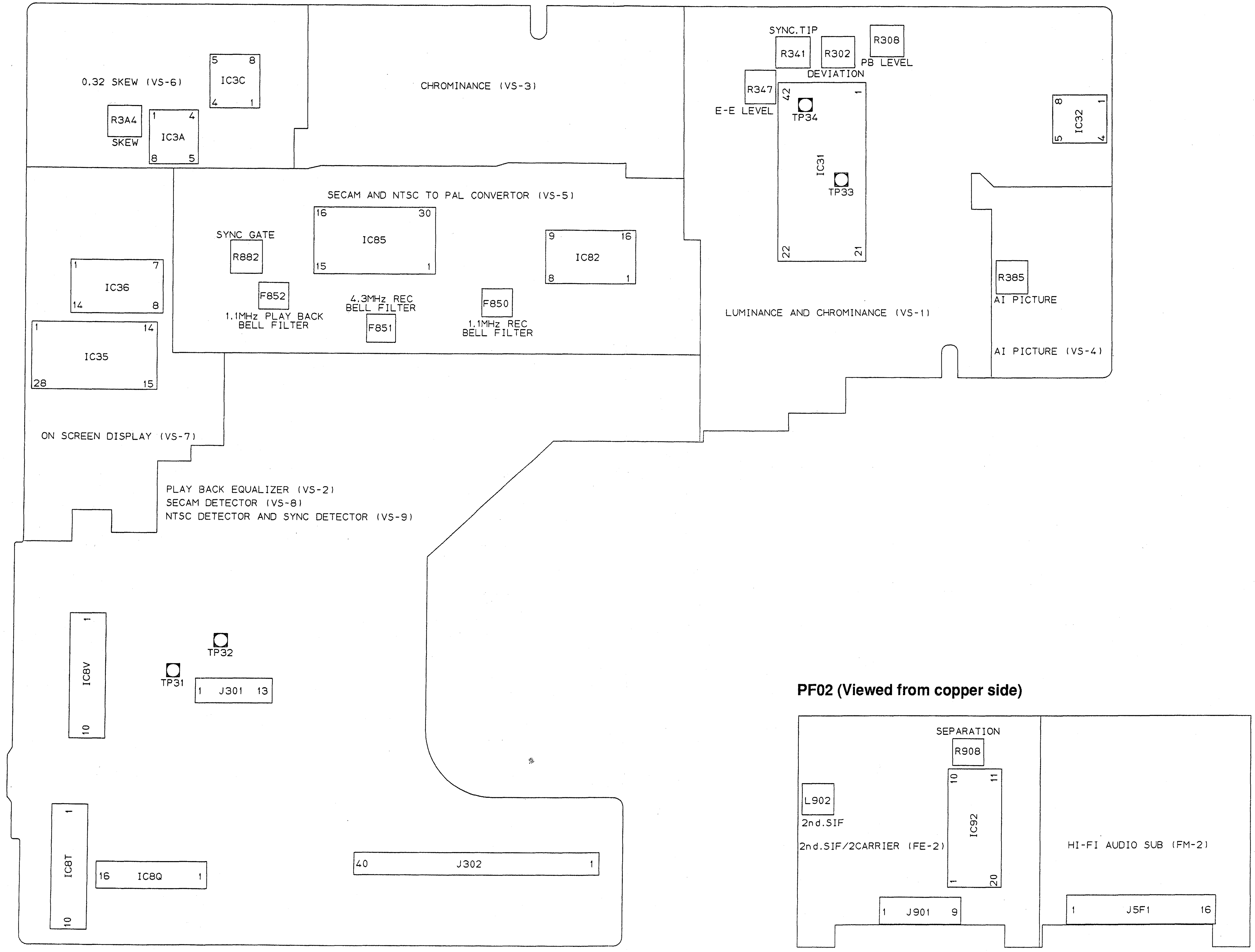
PM01 (Viewed from copper side)


J6K1
1
36
J6K2
CLK
C6K7
EMITTER OF Q6K1
IC6K
64 65
80
1
41
40
25 24
J601
9
1
IC22
1 4
8 5
IC24
9 16
8 1
IC23
9 16
8 1
J605
1
34
E451
TIMER TUNING (TT)
IC6L
1 4
8 5
J606
1
4
IC21
84 1
64
63
21
22
43 42
R237
PHASE GAP SHIFTIER
SERVO-1 (DE-1)
SERVO-3 (DE-3)
R262
LP FWD
SP REV
SP FWD
R261
R260
R263
LP REV
SLOW TRACKING
J607
1
9
AUDIO/VIDEO SELECTOR (IO-1)
IC4E
9 16
8 1
J454
IC4D
9 16
8 1
J455
IC4C
9 16
8 1
IC4F
12 1
IC4A
16 1
9 8
IC4H
12
1
J608
1
40
J453
1
20
LO
LI
RO
RI
VO
VI

PF01 (Viewed from copper side)

J501
1
32
HI-FI AUDIO (FM-1)
R508
PAL 1.4MHz Fo
R523
NTSC 1.7MHz Fo
IC51
81 100
80 1
51 30
50 31
R509
NTSC 1.3MHz Fo
TP502
R524
PAL 1.8MHz Fo
TP504
TP503
J502
4 1
R507
BPF
TP505
TP501

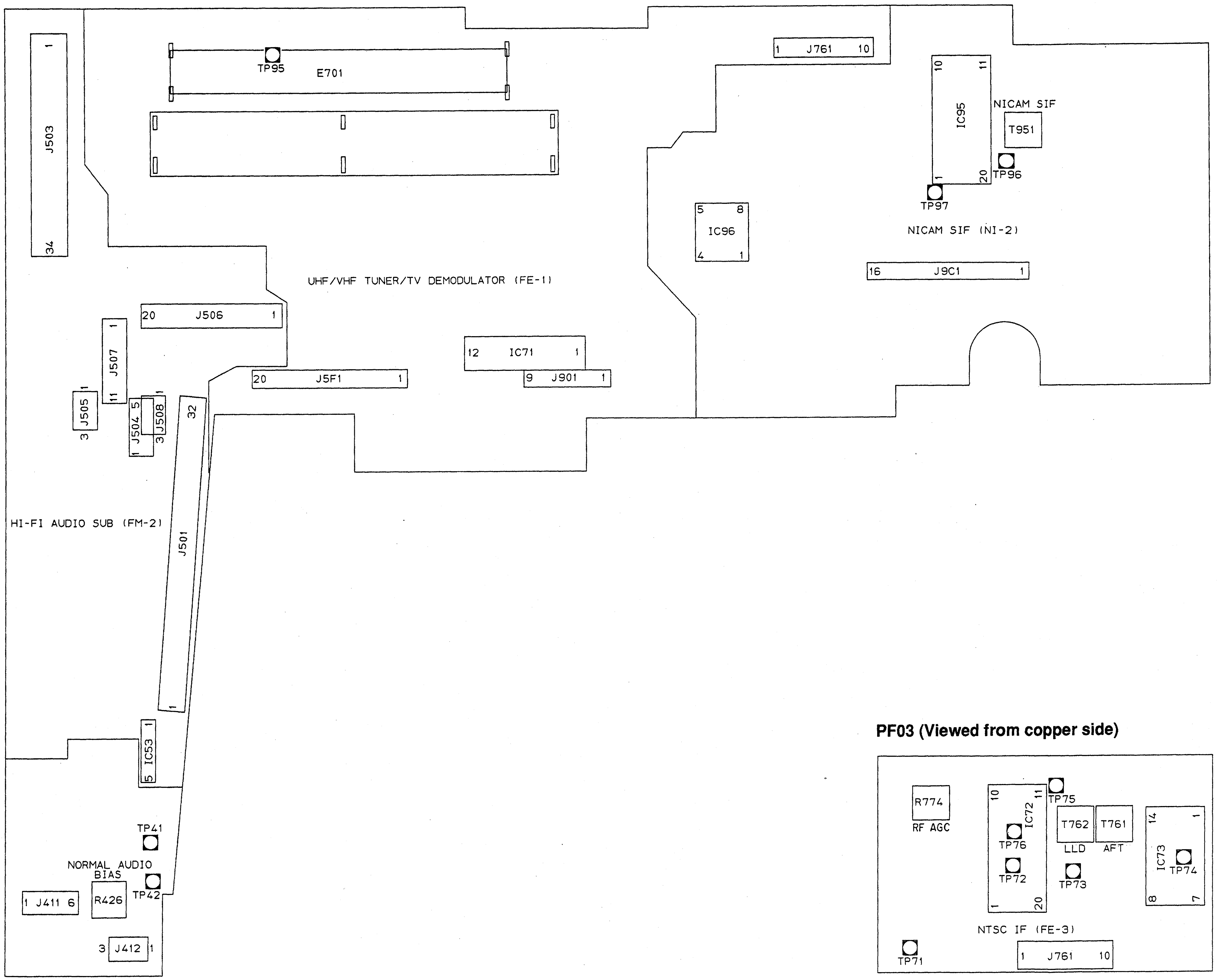
PM02 (Viewed from copper side)


0.32 SKEW (VS-6)
IC3C
R3A4
SKEW
IC3A
CHROMINANCE (VS-3)
SYNC.TIP
R341
R302
R308
PB LEVEL
DEVIATION
R347
E-E LEVEL
TP34
IC31
TP33
IC32
SECAM AND NTSC TO PAL CONVERTOR (VS-5)
SYNC GATE
R882
IC85
IC82
F852
1.1MHz PLAY BACK BELL FILTER
4.3MHz REC BELL FILTER
F851
F850
1.1MHz REC BELL FILTER
IC36
IC35
R385
AI PICTURE
LUMINANCE AND CHROMINANCE (VS-1)
AI PICTURE (VS-4)
ON SCREEN DISPLAY (VS-7)
PLAY BACK EQUALIZER (VS-2)
SECAM DETECTOR (VS-8)
NTSC DETECTOR AND SYNC DETECTOR (VS-9)
IC8V
TP32
TP31
J301
IC8T
IC8Q
J302

PF02 (Viewed from copper side)

SEPARATION
R908
L902
2nd.SIF
2nd.SIF/2CARRIER (FE-2)
IC92
HI-FI AUDIO SUB (FM-2)
J901
J5F1

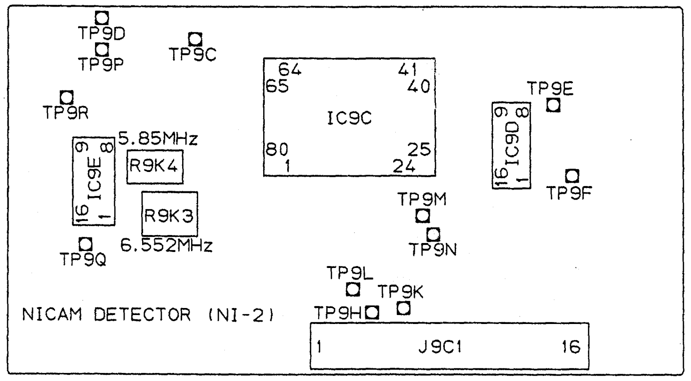
PM03 (Viewed from copper side)


J503
1
34
TP95
E701
1 J761 10
10
11
IC95
1
20
NICAM SIF
T951
TP96
TP97
5 8
IC96
4 1
NICAM SIF (NI-2)
16 J9C1 1
UHF/VHF TUNER/TV DEMODULATOR (FE-1)
20 J506 1
1
J507
11
12 IC71 1
20 J5F1 1
9 J901 1
1
J505
3
5
J504
1
1
J508
3
32
J501
1
HI-FI AUDIO SUB (FM-2)
1
IC53
5
TP41
NORMAL AUDIO
BIAS
TP42
1 J411 6
R426
3 J412 1

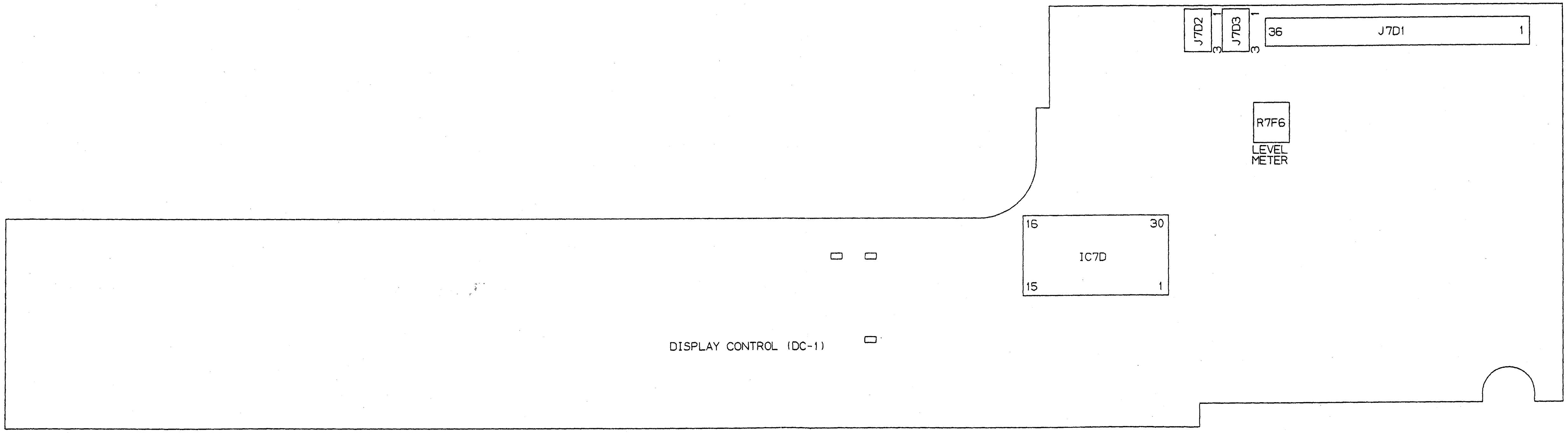
PF03 (Viewed from copper side)

R774
RF AGC
10
11
IC72
1
20
TP75
TP76
TP72
T762
LLD
T761
AFT
TP73
14
1
IC73
8
7
TP74
NTSC IF (FE-3)
TP71
1 J761 10

PN01 (Viewed from copper side)


TP9D
TP9P
TP9C
TP9R
IC9C
64
41
65
40
80
1
25
24
TP9E
IC9D
9
8
16
1
TP9F
5.85MHz
R9K4
IC9E
R9K3
6.552MHz
TP9Q
TP9M
TP9N
TP9L
TP9K
TP9H
NICAM DETECTOR (NI-2)
J9C1
1
16

PC01 (Viewed from copper side)


J7D2
J7D3
1
3
J7D1
36
1
R7F6
LEVEL METER
IC7D
16
30
15
1
DISPLAY CONTROL (DC-1)

1. 2 TEST EQUIPMENT

- DVM (Digital voltmeter). Measuring range: 0.01 - 50V.
- Dual trace oscilloscope. Sensitivity: 0.001 - 50V/Div.
- Frequency counter: Frequency range 0 - 50MHz.
- Signal generator. Sine wave: 0 - 10MHz.
- PAL Video pattern generator.
- Colour TV Receiver or Monitor.
- Plastic Tip driver and non metallic screwdriver.
- VHS Alignment tape (4822 397 30103).

Attention:
Because a life chassis ground is present in the power supply part, an isolation transformer must be used. Also, in order to have the possibility to alter the input voltage slowly when troubleshooting in the power supply section, an adjustable isolation transformer is required.

1. 3 SERVO SECTION

1. 3. 1 Phase gap shiftier adjustment

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TPVO TP31	R237	SP PLAY		VFM8100H3D	OSCILLO SCOPE	T=6.5H ± 0.5H

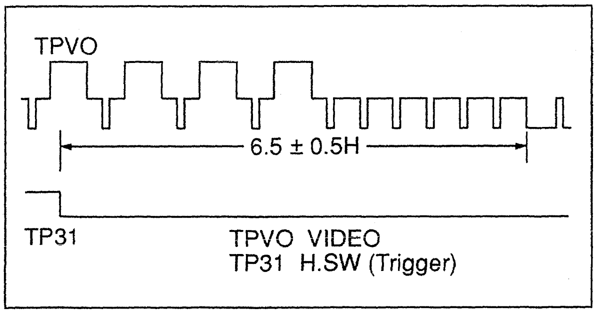


Fig. 1

- * Should be connected pin 6 of IC21 (MN67434VRSG) To GND.
- Connect the oscilloscope to TPVO and TP31.
- Play-back the VHS Alignment Tape (VFM8100H3D).
- Adjust R237 so that the phase difference becomes 6.5 ± 0.5H of shown in Fig. 1.

1. 3. 2 Slow tracking FIX

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
	R260 (SP FWD) R261 (SP REV) R262 (LP FWD) R263 (LP REV)	SELF RECORDING	PAL VIDEO SIGNAL	BLANK TAPE	TV MONITOR	

* Should be connected Pin 6 of IC21 (MN67434VRSG) to GND.

- Record the PAL Video signal and play-back just recorded portion.
- Place the deck in slow mode.
- Adjust the R260 (SP FWD) so that noise disappear on TV screen.
- By the same way, adjust the R261, R262 and R263.
- After adjusting, confirm that the position of tracking become intermediate portion between the point of noise appearance when tracking (+) button is pressed and when tracking (–) button is pressed.

1. 4 TUNER TIMER SECTION

1. 4. 1 CLK

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
Emitter of Q6K1	C6K7	STOP			FREQUENCY COUNTER	32.7678kHz ±0.1Hz

- Put the VCR in the stop mode. Set clock.
- Connect a 4.7kohm Resistor between 11 pin of IC6K and Base of Q6K1.
- Connect a frequency counter to Emitter of Q6K1.
- Adjust the frequency of the signal on Emitter of Q6K1 to 32.7678kHz ± 0.1Hz with C6K7.

1. 5 AUDIO SECTION

1. 5. 1 Normal Audio Bias

TP	ADJ	MODE	TAPE	M. EQ.	SPEC
TP41 (–) TP42 (+)	R426	SELF RECORDING	BLANK TAPE	MILLIVOLT METER	2.4 mV RMS ± 0.1mV

- Connect the millivoltmeter to TP41 and TP42.
- Put the VCR in the SP record mode.
- Adjust the signal level on TP42 with R426 to 2.4 ± 0.1mV RMS on the millivoltmeter.

1. 5. 2 HiFi Audio f_0

TP	ADJ	MODE	TAPE	M. EQ.	SPEC
TP501 (Lch) TP505 (Rch)	PAL: R508 (Lch) R524 (Rch) NTSC: R509 (L CH) R523 (RCH)	SELF RECORDING	BLANK TAPE	FREQUENCY COUNTER	PAL : 1.4MHz ± 4kHz (Lch) 1.8MHz ± 4kHz (Rch) NTSC : 1.3MHz ± 4kHz (Lch) 1.7MHz ± 4kHz (Rch)

- Connect the frequency counter to the TP501 and TP505.
- Set the VCR to recording condition in the NTSC SP mode, and adjust the frequency with R509 adnd R523 to the frequencies specified on the table above.
- After performing the procedure above, change the NTSC mode to the PAL SP mode, and then adjust the frequency with R508 and R524 to the frequencies specified on the table above.

1. 5. 3 HiFi Audio BPF

TP	ADJ	MODE	INPUT	M. EQ.	SPEC
TP503 (Lch) TP504 (Rch)	R507	SP PLAY ON NTSC	1,505 MHz 200mVp-p TP502	OSCILLOSCOPE	

- Supply the sine wave signal of the frequency 1,505MHz/level 200mVp-p from TP502.
- Change the model to NTSC PLAY BACK mode.
- Connect the oscilloscope to the TP503 and TP504, and adjust the amplitude level with R507 to the same level on both TP503 and TP504.

1. 5. 4 Level Meter

TP	ADJ	MODE	INPUT	M. EQ.	SPEC
	R7F6	STOP	1kHz −10dB		

- Supply the sine wave signal of the frequency 1kHz/level–10dB to the audio RCA input.
- Set the VCR to "LINE" in the audio input mode.
- Adjust the stroke level with R7F6 to the same stroke level on both left and right channels of the level meter.

1. 6 LUMINANCE SECTION

1. 6. 1 E-E level

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TPVO	R347	STOP	COLOUR BAR with 100% WHITE		OSCILLOSCOPE	1.0Vp-p ± 0.05Vp-p

- Feed a PAL colour bar with white window signal to the VCR.
- Connect the oscilloscope to TPVO.
- Adjust the signal on TPVO to 1.0Vp-p with R347.

1. 6. 2 SYNC. TIP frequency

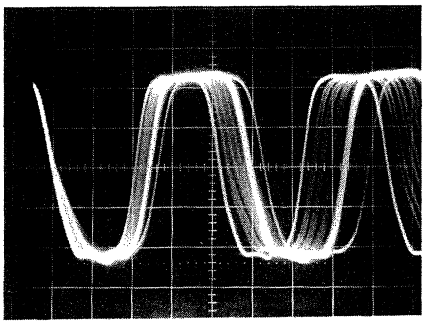
TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP34	R341	SELF RECORDING		BLANK TAPE	FREQUENCY COUNTER	3.8MHz

- Put the VCR in the Recording mode.
- No input signal to the VCR.
- Connect a frequency counter to TP34.
- Adjust the frequency of the signal on TP34 to 3.8 ± 0.04MHz with R341.

1. 6. 3 Deviation

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP34	R302	SELF RECORDING	COLOUR BAR with 100% WHITE	BLANK TAPE	OSCILLOSCOPE	0.21 ± 0.01µsec

- Put the VCR in the Recording mode.
- Feed a colour bar with 100% white colour bar to the VCR.
- Connect the oscilloscope to TP34.
- Set the sensitivity of the scope to 0.2V/Div., the time base to 50nsec./Div.
- Adjust A=0.21 ± 0.01µsec (Fig. 2) with R302.
- Adjust from the beginning of the sweep and measure the first line seen, which is the white window trace on the multiple wave form.
  Focus the scope on the first multiple waveform trace (Fig. 2)
- After completion of the adjustment self record a SP colour bar with 100% white.
- Play-back the portion just recorded and confirm the level at TPVO is 1.0 ± 0.05Vp-p.
- If the levels are not correct then confirm play-back video level and readjust the deviation again.



Sync TIP
Deviation
0.2V/Div 50msec/Div

Fig. 2

1. 6. 4 PB level

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TPVO	R308	SP SELF RECORDING and PLAYBACK	COLOUR BAR with 100% WHITE	BLANK TAPE	OSCILLOSCOPE	1.0 Vp-p ± 0.05Vp-p

- Connect the oscilloscope to TPVO.
- Playback the just recorded portion.
- Adjust the signal on TPVO to 1.0Vp-p with R308.

1. 6. 5 AI Picture

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP33	R385	SP SELF RECORDING and PLAYBACK	COLOUR BAR with 100% WHITE	BLANK TAPE	DIGITAL VOLT METER (DC)	2.6V ± 0.05V

- Connect the digital volt meter to TP33.
- Playback the just recorded portion.
- Adjust the signal on TP33 to 2.6V with R385.

1. 6. 6 Skew compensation

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
	R3A4	SP PLAY		VFM 8000HBD	TV MONITOR	

- Record the NTSC Video Signal and Playback just recorded portion.
- Adjust the R3A4 so that flicker disappear on TV Screen.

1. 7 NICAM SECTION

1. 7. 1 NICAM SIF Adjustment

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP96	T951	E-E	38.9MHZ 90dBµV on TP95 4V on TP97-GND		OSCILLOSCOPE Power Supply	Minimum Voltage

- Connect a oscilloscope to TP96.
- Input the signal of 38.9MHz 90dBµV on TP95.
- Input the voltage of 4V between TP97-GND by Power Supply.
- Adjust the voltage on TP96 with T951 to a minimum voltage on the oscilloscope.

1. 7. 2 5.85MHz Adjustment

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP9L	R9K4	E-E (PAL-BG)	5.8MHz 200mVp-p on TP9R		FREQUENCY COUNTER	5.85 MHz ± 100Hz

- Input the voltage of 5.4V between TP9C (+) – TP9D (–), TP9H (+) – TP9K (–) and TP9E (+) – TP9F (–) by Power Supply.
- Disconnect the pin 1 of J9C1 from PM03.
- Connect the TP95 to GND.
- Connect the frequency counter to TP9L by 1 : 10 probe.
- Input the signal of 5.8MHz 200mVp-p TP9R.
- Adjust the frequency on TP9L with R9K4 to 5.85MHz ± 100Hz on the frequency counter.

1. 7. 3 6.552MHz Adjustment

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP9L	R9K3	E-E (PAL-I)	6.5MHz 200mVp-p on TP9K		FREQUENCY COUNTER	6.552MHz ± 100Hz

- Input the voltage of 5.4V between TP9C (+) – TP9D (–), TP9H (+) – TP9K (–) and TP9E (+) – TP9F (–) by Power Supply.
- Disconnect the pin 1 of J9C1 from PM03.
- Connect the TP95 to GND.
- Connect the frequency counter to TP9L by 1 : 10 probe.
- Input the signal of 6.5MHz 200mVp-p TP9R.
- Adjust the frequency on TP9L with R9K3 to 6.552MHz ± 100Hz on the frequency counter.

1. 8 TUNER SECTION

1. 8. 1 2nd-SIF

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TPRO	L902		1kHz SINE WAVE SIGNAL		HF PATTERN GENERATOR, OSCILLOSCOPE	MAXIMUM AMPLITUDE

- Connect a HF pattern generator which also provides an audio stereo test signal to the RF input of the VCR.
- Tune the VCR to the signal of the pattern generator.
- Set the audio part of the generator to 1 kHz, R channel and pilot.
- Connect the oscilloscope to TPRO.
- Adjust L902 so that the 1 kHz signal on TPRO has maximum amplitude.

1. 8. 2 Channel separation

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TPLO	R908		1 kHz SINE WAVE SIGNAL		HF PATTERN GENERATOR, OSCILLOSCOPE	MINIMUM

- Connect a HF pattern generator which also provides an audio stereo test signal to the RF input of the VCR.
- Tune the VCR to the signal of the pattern generator.
- Set the audio part of the generator to 1 kHz, L channel and pilot.
- Connect the oscilloscope to TPLO.
- Adjust R908 so that the amplitude of the signal on TPLO is minimum.

1. 9 NTSC IF SECTION

1. 9. 1 LLD

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP73	T762		38.9MHz 90dBµV on TP71		OSCILLOSCOPE Power Supply	Minimum Voltage

- Connect a oscilloscope to TP73.
- Input the signal of 38.9MHz 90dBµV on TP71.
- Input the voltage of 3.5V between TP72-GND by Power Supply.
- Adjust the voltage on TP73 with T762 to a minimum voltage on the oscilloscope.

1. 9. 2 AFT

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
TP74	T761		38.9MHz 70dBµV on TP71		OSCILLOSCOPE	2.0V

- Connect a oscilloscope to TP74.
- Input the signal of 38.9MHz 70dBµV on TP71.
- Adjust the voltage on TP74 with T761 to 2.0V.

1. 9. 3 RF AGC

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
J761 Pin 6	R774		38.9MHz 77dBµV on TP71		OSCILLOSCOPE	3.5V

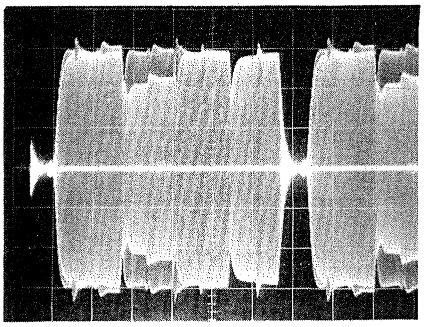
- Connect a oscilloscope to J761-Pin 6.
- Input the signal of 38.9MHz 77dBµV on TP71.
- Adjust the voltage on J761-Pin 6 with R774 to 3.5V.

1. 10 SECAM Chroma Section

1. 10. 1 4.3MHz Rec Bell filter

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
IC85 27 Pin	F851	SP RECORDING	SECAM Colour Bar	BLANK TAPE	OSCILLOSCOPE	

- Connect the oscilloscope to IC85 27Pin.
- Feed a SECAM Colour Bar to the VCR.
- Put the VCR in the Recording mode.
- Adjust the F851 so that the chroma signal becomes flat as shown Fig. 3.



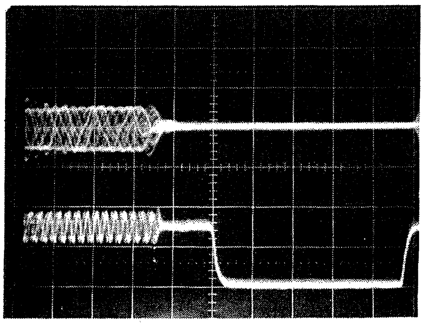
4.3MHz Rec Bell Filter
0.2V/Div 10µsec/Div

Fig. 3

1. 10. 2 SYNC GATE

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
VO IC85 4 Pin	R882	SP RECORDING	SECAM Colour Bar	BLANK TAPE	OSCILLOSCOPE	1.5 ± 0.1µsec

- Connect the oscilloscope to IC85 4Pin.
- Feed a SECAM Colour Bar to the VCR.
- Put the VCR in the Recording mode.
- Adjust the R882 so that the intervals T becomes 1.5 ± 0.1µsec as shown Fig. 4.



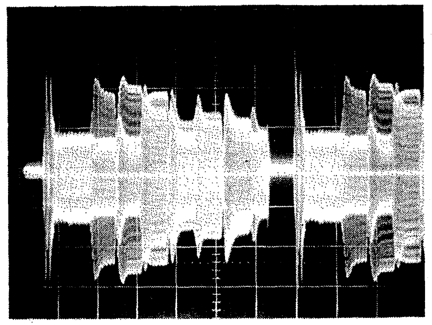
Sync Gate
0.1V/Div 1µsec/Div

Fig. 4

1. 10. 3 1.1MHz Rec Bell filter

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
IC85 4 Pin	F850	SP RECORDING	SECAM Colour Bar	BLANK TAPE	OSCILLOSCOPE	

- Connect the oscilloscope to IC85 4Pin.
- Feed a SECAM Colour Bar to the VCR.
- Put the VCR in the Recording mode.
- Adjust the F850 so that the output wave should be as shown Fig. 5.



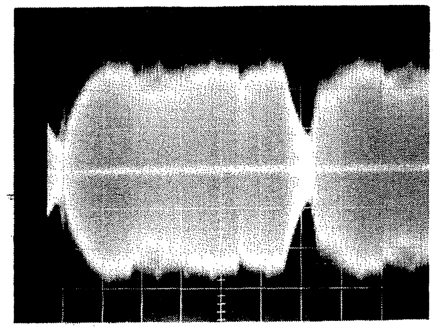
1.1MHz Rec Bell Filter
50mV/Div 10μsec/Div

Fig. 5

1. 10. 4 1.1MHz Play back Bell filter

TP	ADJ	MODE	INPUT	TAPE	M. EQ.	SPEC
IC85 4 Pin	F852	SP SELF RECORDING	SECAM Colour Bar	BLANK TAPE	OSCILLOSCOPE	

- Connect the oscilloscope to IC85 4Pin.
- Feed a SECAM Colour Bar to the VCR.
- Recording the SECAM Colour Bar and Play back.
- Adjust the F852 so that the chroma signal becomes flat as shown Fig. 6.

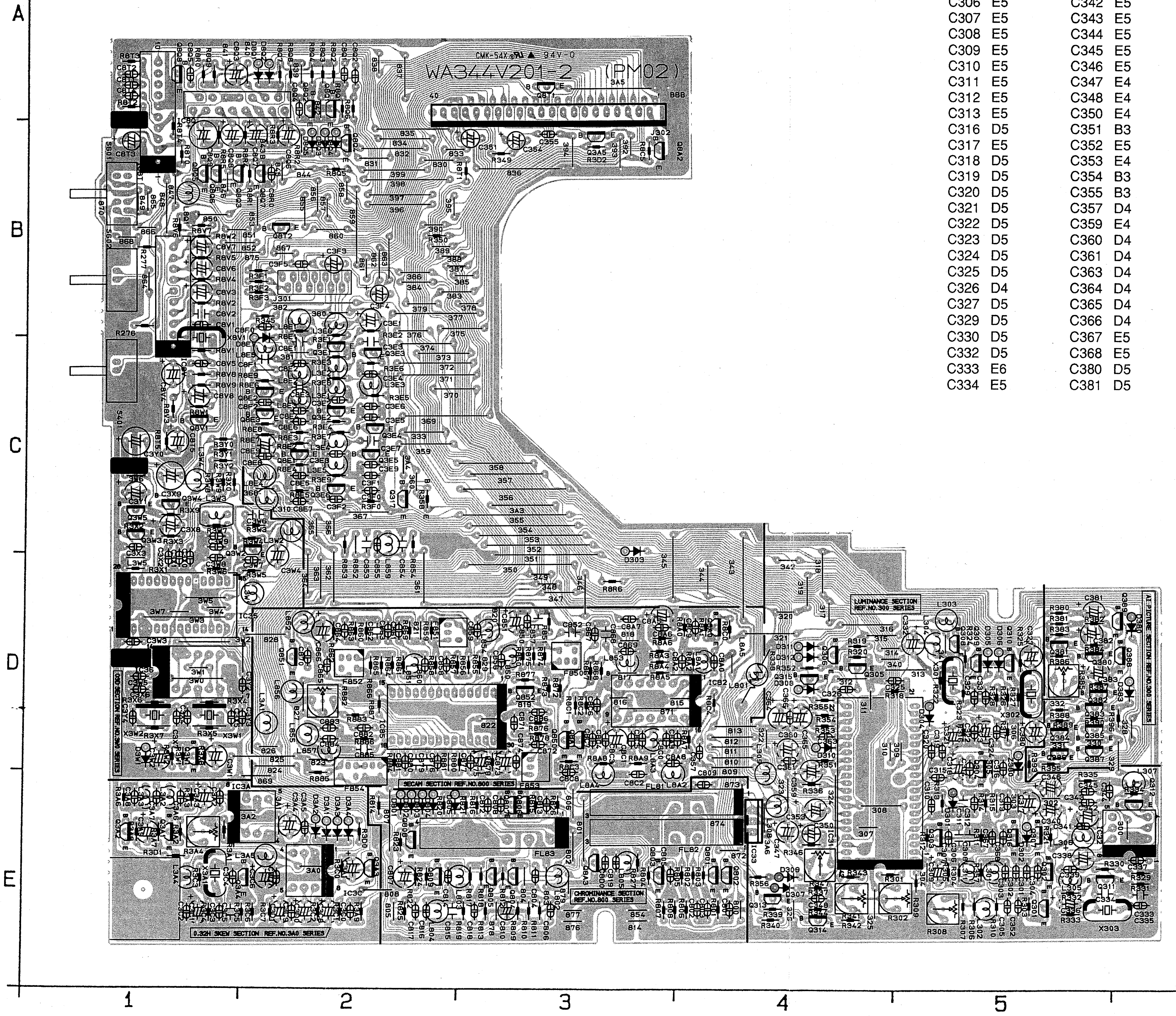


1.1MHz Play Back Bell Filter
0.1V/Div 10μsec

Fig. 6

LUMINANCE and CHROMINANCE/PLAY BACK EQUALIZER/CHROMINANCE /AI PICTURE/SECAM and NTSC to PAL CONVERTOR/0.32 SKEW for NTSC/ ON SCREEN DISPLAY/SECAM DETECTOR/NTSC DETECTOR and SYNC DETECTOR PCB DRAWING PM02

"Inserted components are dependent on set type"


A
B
C
D
E
1
2
3
4
5
6
7
CMK-54X 94V-0
WA344V201-2 (PM02)
LUMINANCE SECTION REF.NO.300 SERIES
AI PICTURE SECTION REF.NO.300 SERIES
SECAM SECTION REF.NO.800 SERIES
CHROMINANCE SECTION REF.NO.800 SERIES
0.32H SKEW SECTION REF.NO.3A0 SERIES

CAPACITORS

C301	E5
C302	E5
C303	E5
C304	D5
C304	E5
C305	E5
C306	E5
C307	E5
C308	E5
C309	E5
C310	E5
C311	E5
C312	E5
C313	E5
C316	D5
C317	E5
C318	D5
C319	D5
C320	D5
C321	D5
C322	D5
C323	D5
C324	D5
C325	D5
C326	D4
C327	D5
C329	D5
C330	D5
C332	D5
C333	E6
C334	E5
C335	E6
C336	E5
C337	E6
C338	E5
C339	E5
C340	E5
C341	E5
C342	E5
C343	E5
C344	E5
C345	E5
C346	E5
C347	E4
C348	E4
C350	E4
C351	B3
C352	E5
C353	E4
C354	B3
C355	B3
C357	D4
C359	E4
C360	D4
C361	D4
C363	D4
C364	D4
C365	D4
C366	D4
C367	E5
C368	E5
C380	D5
C381	D5
C382	D5
C383	D5
C3A1	E2
C3A2	E1
C3A3	E1
C3A4	E2
C3A5	E2
C3A6	E1
C3A7	E1
C3A8	E1
C3A9	E1
C3C0	E2
C3C1	E1
C3C2	E1
C3C3	E1
C3C4	E1
C3C5	E1
C3C6	E2
C3C7	E2
C3C8	E2
C3C9	E2
C3D0	E2
C3D1	E2
C3E1	B2
C3E2	C2
C3E3	C2
C3E4	C2
C3E5	C2
C3E6	C2
C3E7	C2
C3E8	C2
C3E9	C2
C3F0	C2
C3F1	C2
C3F2	C2
C3F3	B2
C3F4	B2
C3F5	B2
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C3W2	D1
C3W3	D1
C3W4	D2
C3W5	D1
C3W6	C2
C3W7	D2
C3W8	D1
C3W9	C1
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C3X1	D1
C3X2	D1
C3X3	C1
C3X4	D1
C3X5	D1
C3X6	D1
C3X7	D1
C3X8	C1
C3X9	C1
C3Y0	C1
C3Y1	C1
C3Y2	D2
C3Y3	D2
C3Y4	D1
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C810	E3
C812	E3
C813	E3
C814	E2
C815	E2
C816	E2
C817	E2
C818	E3
C819	E3
C850	D3
C851	D3
C852	D3
C853	C2
C854	C2
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C856	D3
C857	D3
C858	D2
C859	D3
C860	D2
C861	D2
C862	D2
C863	D2
C864	D2
C865	D2
C866	D2
C867	D3
C868	D3
C869	D3
C870	D2
C871	D3
C872	D3
C873	D3
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C876	D2
C877	D3
C879	D2
C880	D2
C881	D2
C882	D2
C883	D2
C884	D2
C885	D2
C886	D3
C8A0	D4
C8A2	D4
C8A5	D3
C8A6	D3
C8A7	D3
C8A8	D3
C8A9	D3
C8C0	D3
C8C1	D3
C8C2	E3
C8C3	D3
C8C4	D3
C8C5	D3
C8C6	D3
C8C7	D3
C8C8	E3
C8C9	D4
C8D0	E3
C8E1	C2
C8E2	C2
C8E3	C2
C8E4	C2
C8E5	C2
C8E6	C2
C8E7	C2
C8E8	C2
C8E9	C2
C8F0	B2
C8F1	C2
C8F2	C2
C8Q1	A2
C8Q2	A2
C8Q3	A1
C8Q4	A2
C8Q5	A1
C8Q6	B2
C8Q7	B2
C8Q8	B1
C8Q9	B1
C8R0	B2
C8T1	A1
C8T2	A1
C8T3	B1
C8T4	A1
C8T5	C1
C8V1	B1
C8V2	B1
C8V3	B1
C8V4	C1
C8V5	C1
C8V6	B1
C8V7	B1
C8V8	C1

DIODES

D301	E5
D302	E5
D303	C3
D304	D5
D305	D5
D306	D5
D307	E4
D308	D4
D309	E4
D310	D4
D311	D4
D312	D4
D380	D6
D383	D6
D3A1	E2
D3A2	E2
D3A3	E2
D3A4	E2
D3W1	D1
D801	E2
D802	E2
D803	E2
D804	E2
D805	E2
D8E1	C2
D8Q1	A2
D8Q2	A2
D8Q3	B2
D8Q4	B2
D8Q5	B2

FILTERS

FL81	E3
FL82	E4
FL83	E3

ICs

IC31	E4
IC32	E6
IC33	E4
IC35	D1
IC36	D1
IC3A	E2
IC3C	E2
IC82	D4
IC85	D2
IC8Q	A1
IC8V	C1
IC8T	B1
IC8V	C1

CONNECTORS

J301	B2
J302	A3

COILS

L301	E5
L302	E5
L303	D5
L304	D5
L305	E5
L306	E5
L307	D6
L308	E4
L309	D4
L310	C2
L311	E5
L3A1	D2
L3A2	E1
L3A3	E1
L3A4	E1
L3A5	E2
L3E1	C2
L3E2	C2
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L856	D2
L857	D2
L859	C2
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L8A3	D3
L8A4	E3
L8A5	D4
L8E1	B2
L8E2	C2
L8E3	C2
L8E4	C2
L8E5	C2
L8Q1	B1

TRANSISTORS

Q301	E5
Q302	E5
Q303	E5
Q304	D5
Q305	D4
Q306	D4
Q307	E5
Q308	D5
Q309	D5
Q310	D5
Q311	E5
Q312	E6
Q313	E4
Q314	E4
Q315	D4
Q316	E5
Q317	C2
Q380	D5
Q381	D5
Q382	D5
Q383	D5
Q384	D5
Q385	D5
Q386	D5
Q387	D5
Q388	D6
Q389	D6
Q3A1	E1
Q3A2	E1
Q3A3	E2
Q3A4	E2
Q3A5	B3
Q3E1	C2
Q3E2	C2
Q3E3	C2
Q3E4	C2
Q3E5	C2
Q3E6	C2
Q3W1	D1
Q3W2	C2
Q3W3	C1
Q3W4	C1
Q3W5	C1
Q801	E4
Q802	E4
Q803	E3
Q804	E3
Q805	E3
Q806	E3
Q807	E3
Q808	E2
Q809	E2
Q811	A3
Q850	D3
Q851	D2
Q852	D3
Q8A0	D4
Q8A1	D3
Q8A2	B3
Q8A3	E3
Q8E1	C2
Q8E2	C2
Q8E3	C2
Q8Q1	A2
Q8Q2	A2
Q8Q3	B1
Q8Q4	B2
Q8Q5	B1
Q8Q6	B1
Q8Q7	B2
Q8Q8	A1
Q8T1	A3
Q8T2	B2
Q8V1	C1

RESISTORS

L3W4	C1
R276	B1
R277	B1
R301	E4
R302	E5
R303	E5
R304	E5
R305	E5
R306	E5
R307	E5
R308	E5
R309	E5
R310	E5
R311	E5
R312	E5
R313	E5
R314	E5
R315	E5
R316	D5
R317	D5
R318	D5
R319	D4
R320	D4
R321	E5
R322	D5
R323	D5
R324	D5
R325	D5
R326	D5
R327	D5
R328	D5
R329	E6
R330	E5
R331	E6
R332	E5
R333	E5
R334	E6
R335	E5
R336	E4
R337	E4
R338	D4
R339	E4
R340	E4
R341	E4
R342	E4
R343	E4
R344	E4
R345	B2
R346	E4
R347	E4
R349	B3
R350	B2
R351	D4
R352	D4
R353	D4
R354	D4
R355	D4
R356	E4
R357	E5
R358	C2
R380	D5
R381	D5
R382	D5
R383	D5
R384	D5
R385	D5
R386	D5
R387	D5
R388	D5
R389	D5
R390	D5
R393	D5
R395	D5
R396	D6
R3A1	E1
R3A2	E1
R3A3	E1
R3A4	E1
R3A6	E1
R3A7	E1
R3A8	E1
R3A9	E2
R3C0	E2
R3C1	E2
R3C2	E2
R3C3	E1
R3C4	E1
R3C5	E2
R3C6	E2
R3C7	E2
R3D0	E2
R3D1	E1
R3D2	B3
R3E1	C2
R3E2	B2
R3E3	C2
R3E4	C2
R3E5	C2
R3E6	C2
R3E7	C2
R3E8	C2
R3E9	C2
R3F0	C2
R3F1	B2
R3F2	B2
R3F3	B2
R3W1	D1
R3W2	D1
R3W3	C2
R3W4	C2
R3W5	D2
R3W6	D1
R3W7	C1
R3W8	C1
R3W9	C1
R3X0	C1
R3X1	D1
R3X2	C1
R3X3	C1
R3X4	D1
R3X5	D1
R3X6	D1
R3X7	D1
R3X8	D1
R3X9	C1
R3Y0	C1
R3Y1	C1
R3Y2	C1
R801	E4
R802	E4
R803	E4
R804	E3
R805	E4
R806	E4
R807	E3
R808	E4
R809	E3
R810	E3
R811	E3
R812	E3
R813	E3
R814	E2
R815	E3
R816	E3
R817	E3
R818	E3
R819	E3
R820	E2
R821	E3
R822	E2
R823	E2
R824	E2
R825	E2
R826	E3
R827	E3
R850	D3
R851	D3
R852	C2
R853	C2
R854	C2
R855	D3
R856	D3
R857	D2
R858	D2
R859	D2
R860	D2
R861	D2
R862	D2
R863	D2
R864	D2
R865	D2
R866	D2
R867	D3
R868	D3
R869	D2
R872	D3
R873	D3
R874	D3
R875	D3
R876	D3
R877	D3
R878	D3
R879	D3
R880	D3
R881	D2
R882	D2
R883	D2
R884	D2
R885	E2
R886	D2
R887	D2
R8A0	D4
R8A1	D4
R8A2	D4
R8A3	D3
R8A4	D3
R8A5	D3
R8A6	D3
R8A7	D4
R8A8	D3
R8A9	D3
R8C0	D4
R8C1	D3
R8C2	D3
R8C3	D3
R8C4	D4
R8C5	B3
R8E1	C2
R8E2	C2
R8E3	C2
R8E4	C2
R8E5	C2
R8E6	C2
R8E7	C2
R8E8	C2
R8E9	C2
R8Q1	A2
R8Q2	A2
R8Q3	A2
R8Q4	A2
R8Q5	B2
R8Q6	A2
R8Q7	A2
R8Q8	A2
R8Q9	A1
R8R0	A1
R8R1	B2
R8R2	B2
R8R3	B2
R8R4	B2
R8R5	B1
R8R6	D3
R8T0	B1
R8T1	B2
R8T2	A1
R8T3	A1
R8T4	B1
R8T5	C1
R8V1	C1
R8V2	B1
R8V3	C1
R8V4	B1
R8V5	B1
R8V6	B1
R8V7	B1
R8V8	C1
R8V9	C1
R8W1	C1
R8W2	B1

SWITCHES

S401	C1
S601	B1
S602	B1

X'TALS

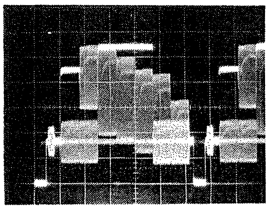
X301	D5
X302	D5
X303	E5
X3A1	E1
X3W1	D1
X3W2	D1
X8V1	B1

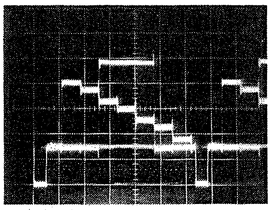
ZENERS

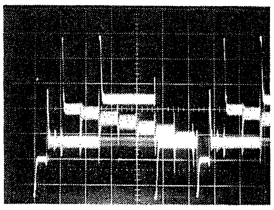
D380	D6
Z380	D5

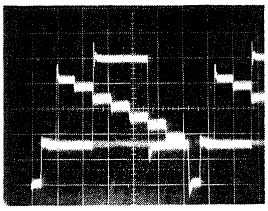
OTHERS

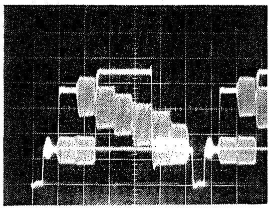
F850	D3
F851	D2
F852	D2
F853	E3
F854	E2

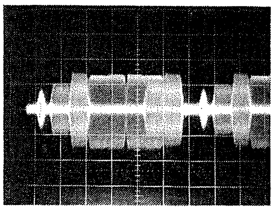

① Pin37 REC PAL SP
0.2V/Div 10μsec/Div

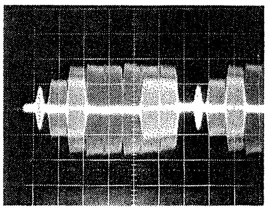

② Pin4 REC PAL SP
0.1V/Div 10μsec/Div

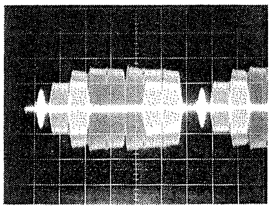

③ Pin5 REC PAL SP
0.2V/Div 10μsec/Div

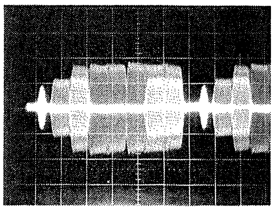

④ Pin4 PAL SP PB
0.1V/Div 10μsec/Div


⑤ Pin34 PAL SP PB
0.5V/Div 10μsec/Div


⑥ Pin25 PAL SP PB
0.5V/Div 10μsec/Div


⑦ Pin27 PAL SP PB
50mV/Div 10μsec/Div


⑧ Pin31 PAL SP PB
0.2V/Div 10μsec/Div

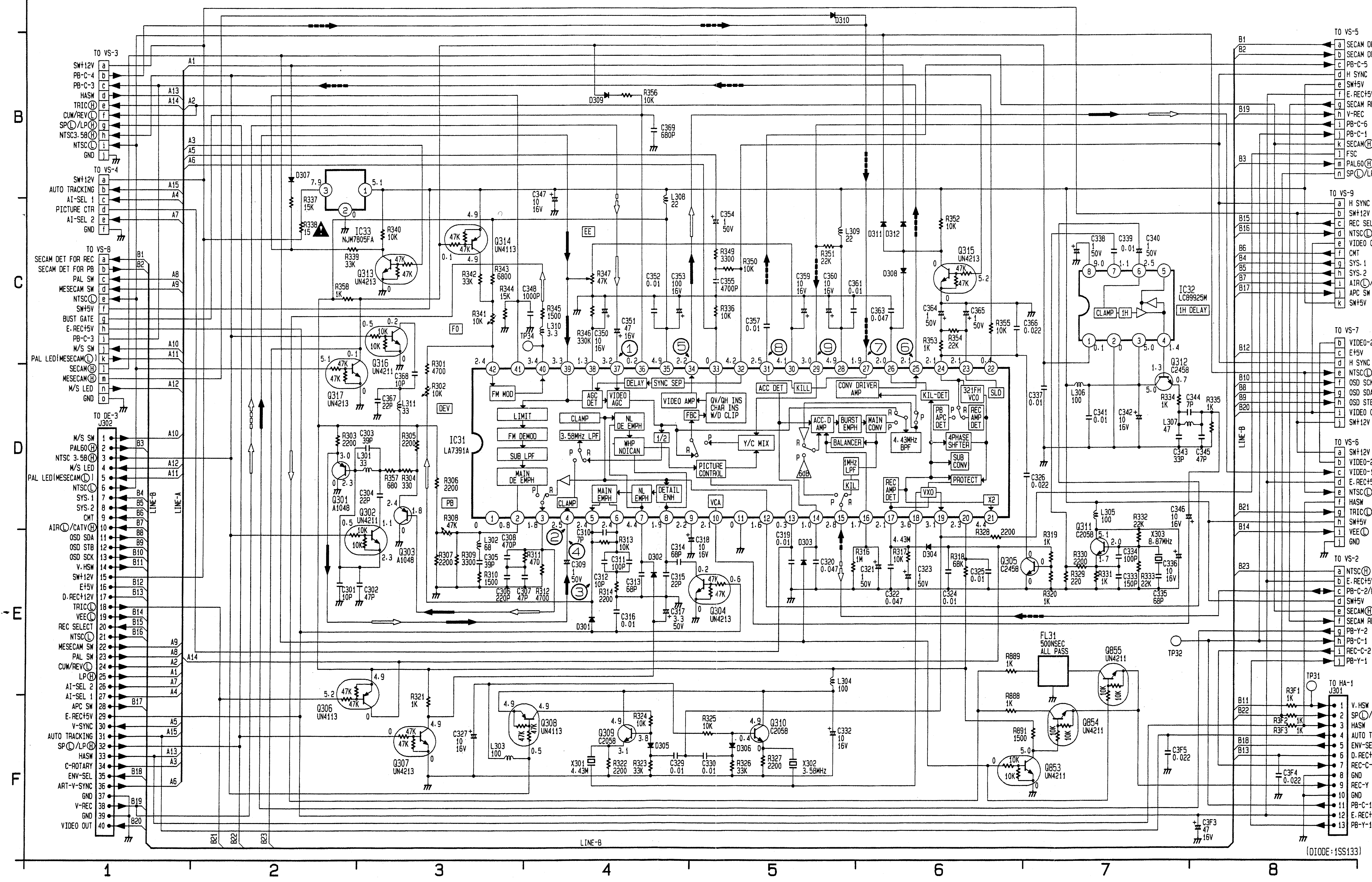

⑨ Pin29 PAL SP PB
50mV/Div 10μsec/Div

PM02 (VS-1)

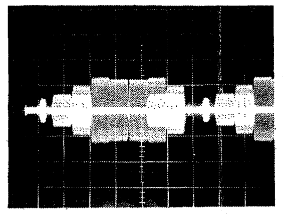
CAPACITORS	
C301	E2
C302	E3
C303	D3
C304	D3
C305	E3
C306	E3
C307	E4
C308	E3
C309	E4
C310	E4
C311	E4
C312	E4
C313	E4
C314	E4
C315	E4
C316	E4
C317	E4
C318	E5
C319	E5
C320	E5
C321	E6
C322	E6
C323	E6
C324	E6
C325	E6
C326	D7
C327	F3
C329	F4
C330	F5
C332	F6
C333	E7
C334	E7
C335	E7
C336	E7
C337	D7
C338	C7
C339	C7
C340	C7
C341	D7
C342	D7
C343	D7
C344	D7
C345	D8
C346	D7
C347	B4
C348	C4
C350	C4
C351	C4
C352	C4
C353	C4
C354	C5
C355	C5
C357	C5
C359	C5
C360	C5
C361	C5
C363	C6
C364	C6
C365	C6
C366	C6
C367	D3
C368	D3
C369	B4
C3F3	F8
C3F4	F8
C3F5	F7
DIODES	
D301	E4
D302	E4
D303	E5
D304	E6
D305	F4
D306	F5
D307	B2
D308	C6
D309	B4
D310	A5
D311	C6
D312	C6
FILTER	
FL31	E7
ICs	
IC31	D3
IC32	C7
IC33	C2
CONNECTORS	
J301	F8
J302	D1
COILS	
L301	D3
L302	E3
L303	F3
L304	E5
L305	D7
L306	D7
L307	D7
L308	C4
L309	C5
L310	C4
L311	D3
TRANSISTORS	
Q301	D2
Q302	E3
Q303	D3
Q304	E5
Q305	E7
Q306	F2
Q307	F3
Q308	F4
Q309	F4
Q310	F5
Q311	E7
Q312	D7
Q313	C3
Q314	C3
Q315	C6
Q316	C3
Q317	D2
Q853	F6
Q854	F7
Q855	E7
RESISTORS	
R301	D3
R302	D3
R303	D2
R304	D3
R305	D3
R306	D3
R307	E3
R308	E3
R309	E3
R310	E3
R311	E4
R312	E4
R313	E4
R314	E4
R316	E5
R317	E6
R318	E6
R319	E7
R320	E7
R321	F3
R322	F4
R323	F4
R324	F4
R325	F5
R326	F5
R327	F5
R328	E6
R329	E7
R330	E7
R331	E7
R332	E7
R333	E7
R334	D7
R335	D8
R336	C5
R337	C2
R338	C2
R339	C2
R340	C3
R341	C3
R342	C3
R343	C3
R344	C3
R345	C4
R346	C4
R347	C4
R349	C5
R350	C5
R351	C5
R352	C6
R353	C6
R354	C6
R355	C6
R356	B4
R357	D3
R358	C2
R888	F6
R889	E6
R891	F7
R3F1	F8
R3F2	F8
R3F3	F8
TEST POINTS	
TP31	E8
TP32	E7
TP34	C4
X'TALS	
X301	F4
X302	F5
X303	E7

LUMINANCE AND CHROMINANCE SCHEMATIC DIAGRAM (VS-1) PM02

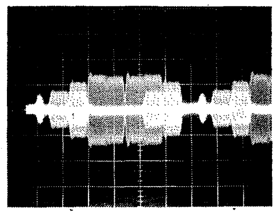
⇐ MAIN SIGNAL PATH IN REC Y MODE
⇐ MAIN SIGNAL PATH IN PB Y MODE
⇐ REC C MODE
⇐ PB C MODE


A
B
C
D
E
F
1
2
3
4
5
6
7
8
TO VS-3
SW+12V a
PB-C-4 b
PB-C-3 c
HASW d
TRIC(H) e
CUW/REV(L) f
SP(L)/LP(H) g
NTSC3.58(H) h
NTSC(L) i
GND j
TO VS-4
SW+12V a
AUTO TRACKING b
AI-SEL 1 c
PICTURE CTR d
AI-SEL 2 e
GND f
TO VS-8
SECAM DET FOR REC a
SECAM DET FOR PB b
PAL SW c
MESECAM SW d
NTSC(L) e
SW+5V f
BUST GATE g
E.REC+5V h
PB-C-3 i
M/S SW j
PAL LED(MESECAM(L)) k
SECAM(H) l
MESECAM(H) m
M/S LED n
GND o
TO DE-3
J302
M/S SW 1
PAL60(H) 2
NTSC 3.58(H) 3
M/S LED 4
PAL LED(MESECAM(L)) 5
NTSC(L) 6
SYS.1 7
SYS.2 8
CMT 9
AIR(L)/CATV(H) 10
OSD SDA 11
OSD STB 12
OSD SCK 13
V.HSW 14
SW+12V 15
E+5V 16
D.REC+12V 17
TRIC(L) 18
VEE(L) 19
REC SELECT 20
NTSC(L) 21
MESECAM SW 22
PAL SW 23
CUW/REV(L) 24
LP(H) 25
AI-SEL 2 26
AI-SEL 1 27
APC SW 28
E.REC+5V 29
V-SYNC 30
AUTO TRACKING 31
SP(L)/LP(H) 32
HASW 33
C-ROTARY 34
ENV-SEL 35
ART-V-SYNC 36
GND 37
V-REC 38
GND 39
VIDEO OUT 40
LINE-B
LINE-A
LINE-B
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
B17
B18
B19
B20
B21
B22
B23
D310
D309
R356 10K
C369 680P
D307
R337 15K
R338 15
IC33 NJM7805FA
R340 10K
R339 33K
Q313 UN4213
R358 1K
Q314 UN4113
R342 33K
R343 6800
R344 15K
C348 1000P
R345 1500
L310 3.3
TP34
R341 10K
C347 10 16V
EE
R347 47K
L308 22
C354 1 50V
R349 3300
C355 4700P
R336 10K
R350 10K
L309 22
R351 22K
C352 0.01
C353 100 16V
C351 47 16V
R346 330K
C350 10 16V
C357 0.01
C359 10 16V
C360 10 16V
C361 0.01
C363 0.047
D311
D312
D308
R352 10K
Q315 UN4213
C364 1 50V
C365 1 50V
R353 1K
R354 22K
R355 10K
C366 0.022
F0
Q316 UN4211
Q317 UN4213
R301 4700
R302 10K
C368 10P
C367 22P
L311 33
DEV
R303 2200
C303 39P
L301 33
R305 2200
R357 680
R304 330
Q301 A1048
C304 22P
Q302 UN4211
Q303 A1048
C301 10P
C302 47P
IC31 LA7391A
R306 2200
PB
R308 47K
R307 2200
R309 3300
L302 68
C308 470P
C305 39P
R310 1500
C306 220P
C307 47P
R311 470
R312 4700
C310 7P
R313 10K
C311 100P
C309 1 50V
C312 10P
R314 2200
C313 68P
C316 0.01
D301
D302
C314 68P
C318 10 16V
C315 22P
C317 3.3 50V
Q304 UN4213
C319 0.01
D303
C320 0.047
R316 1M
C321 1 50V
R317 10K
D304
C322 0.047
C323 1 50V
R318 68K
C325 0.01
C324 0.01
FM MOD
LIMIT
FM DEMOD
SUB LPF
MAIN DE EMPH
AGC DET
VIDEO AGC
CLAMP
3.58MHz LPF
NL DE EMPH
WHP NOICAN
1/2
DELAY
SYNC SEP
VIDEO AMP
QV/QH INS CHAR INS W/D CLIP
FBC
Y/C MIX
PICTURE CONTROL
MAIN EMPH
NL EMPH
DETAIL ENH
VCA
CLAMP
ACC DET
KILL
CONV DRIVER AMP
ACC.D AMP
BURST EMPH
MAIN CONV
BALANCER
4.43MHz BPF
6dB
1MHz LPF
KIL
REC AMP DET
VXO
KIL-DET
PB APC DET
REC AMP DET
321FH VCO
SLO
4PHASE SHFTER
SUB CONV
PROTECT
X2
4.43M
C337 0.01
C326 0.022
C338 1 50V
C339 0.01
C340 1 50V
IC32 LC89925M
CLAMP
1H
1H DELAY
Q312 C2458
L306 100
C341 0.01
C342 10 16V
R334 1K
C344 7P
R335 1K
L307 47
C343 33P
C345 47P
R319 1K
Q311 C2058
L305 100
R332 22K
X303 8.87MHz
C346 10 16V
R328 2200
Q305 C2458
R330 2200
R329 220
R331 1K
C334 100P
C333 150P
R333 22K
C336 10 16V
C335 68P
R320 1K
FL31 500NSEC ALL PASS
Q855 UN4211
R889 1K
R888 1K
R891 1500
Q854 UN4211
Q853 UN4211
TP32
C3F5 0.022
TP31
R3F1 1K
R3F2 1K
R3F3 1K
C3F4 0.022
C3F3 47 16V
Q306 UN4113
R321 1K
Q307 UN4213
C327 10 16V
Q308 UN4113
L303 100
L304 100
Q309 C2058
R324 10K
D305
R325 10K
Q310 C2058
D306
C332 10 16V
X301 4.43M
R322 2200
R323 33K
C329 0.01
C330 0.01
R326 33K
R327 2200
X302 3.58MHz
TO VS-5
SECAM DET FOR REC a
SECAM DET FOR PB b
PB-C-5 c
H SYNC d
SW+5V e
E.REC+5V f
SECAM REC-C g
V-REC h
PB-C-6 i
PB-C-1 j
SECAM(H) k
FSC l
PAL60(H) m
SP(L)/LP(H) n
TO VS-9
H SYNC a
SW+12V b
REC SELECT c
NTSC(L) d
VIDEO OUT e
CMT f
SYS.1 g
SYS.2 h
AIR(L)/CATV(H) i
APC SW j
SW+5V k
TO VS-7
VIDEO-2 b
E+5V c
H SYNC d
NTSC(L) e
OSD SCK f
OSD SDA g
OSD STB h
VIDEO OUT i
SW+12V j
TO VS-6
SW+12V a
VIDEO-2 b
VIDEO-1 c
E.REC+5V d
NTSC(L) e
HASW f
TRIC(L) g
SW+5V h
VEE(L) i
GND j
TO VS-2
NTSC(H) a
E.REC+5V b
PB-C-2/REC-C-1 c
SW+5V d
SECAM(H) e
SECAM REC-C f
PB-Y-2 g
PB-C-1 h
REC-C-2 i
PB-Y-1 j
TO HA-1
J301
V.HSW 1
SP(L)/LP(H) 2
HASW 3
AUTO TRACKING 4
ENV-SEL 5
D.REC+12V 6
REC-C-2 7
GND 8
REC-Y 9
GND 10
PB-C-1 11
E.REC+5V 12
PB-Y-1 13
LINE-B
(DIODE:1SS133)

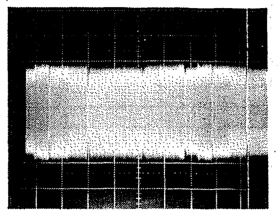
PLAY BACK EQUALIZER SCHEMATIC DIAGRAM (VS-2) PM02



⑮ REC PAL SP
0.2V/Div 10µsec/Div



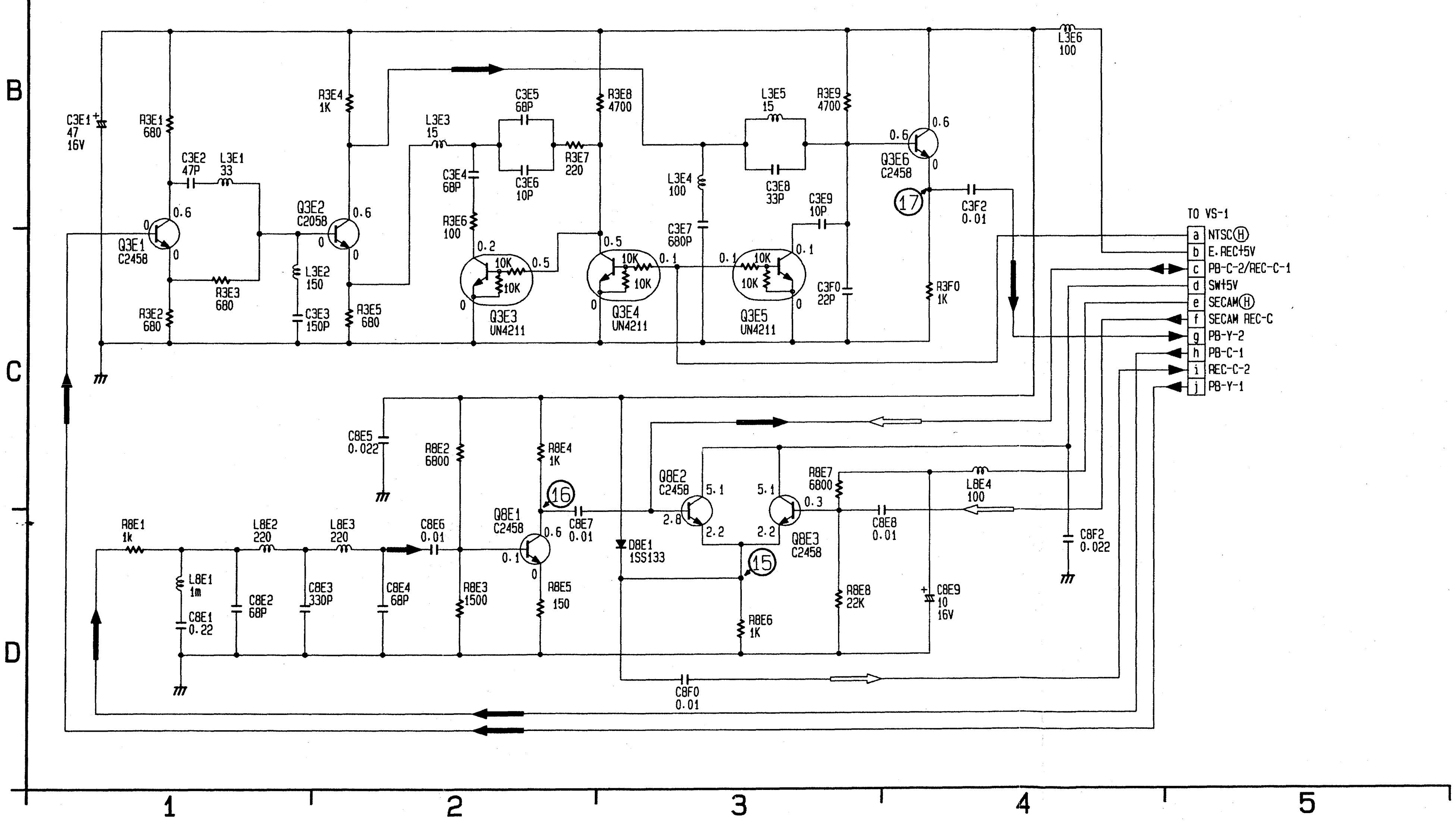
⑯ PAL SP PB
0.1V/Div 10µsec/Div



⑰ PAL SP PB
0.2V/Div 10µsec/Div

⇦ MAIN SIGNAL PATH IN REC MODE

⬅ MAIN SIGNAL PATH IN PB MODE


A
B
C
D
1
2
3
4
5
C3E1 47 16V
R3E1 680
C3E2 47P
L3E1 33
Q3E1 C2458
0
0.6
0
R3E3 680
R3E2 680
Q3E2 C2058
0.6
0
0
L3E2 150
C3E3 150P
R3E4 1K
R3E5 680
L3E3 15
C3E4 68P
R3E6 100
C3E5 68P
C3E6 10P
R3E7 220
0.2
10K
10K
0.5
0
Q3E3 UN4211
R3E8 4700
0.5
10K
10K
0.1
0
Q3E4 UN4211
L3E4 100
C3E7 680P
L3E5 15
C3E8 33P
0.1
10K
10K
0.1
0
Q3E5 UN4211
C3E9 10P
R3E9 4700
C3F0 22P
0.6
0.6
0
Q3E6 C2458
⑰
C3F2 0.01
R3F0 1K
L3E6 100
TO VS-1
a NTSC(H)
b E.REC+5V
c PB-C-2/REC-C-1
d SW+5V
e SECAM(H)
f SECAM REC-C
g PB-Y-2
h PB-C-1
i REC-C-2
j PB-Y-1
C8E5 0.022
R8E2 6800
R8E4 1K
⑯
R8E1 1k
L8E1 1m
C8E1 0.22
L8E2 220
C8E2 68P
L8E3 220
C8E3 330P
C8E4 68P
C8E6 0.01
R8E3 1500
Q8E1 C2458
0.6
0.1
0
R8E5 150
C8E7 0.01
D8E1 1SS133
Q8E2 C2458
5.1
2.8
2.2
Q8E3 C2458
5.1
2.2
0.3
⑮
R8E6 1K
R8E7 6800
C8E8 0.01
R8E8 22K
L8E4 100
C8E9 10 16V
C8F2 0.022
C8F0 0.01

CAPACITORS	
C3E1	B1
C3E2	B1
C3E3	C1
C3E4	B2
C3E5	B2
C3E6	B2
C3E7	B3
C3E8	B3
C3E9	B3
C3F0	C3
C3F2	B4
C8E1	D1
C8E2	D1
C8E3	D1
C8E4	D2
C8E5	C2
C8E6	D2
C8E7	D2
C8E8	D4
C8E9	D4
C8F0	D3
C8F2	D4

DIODE	
D8E1	D3

COILS	
L3E1	B1
L3E2	C1
L3E3	B2
L3E4	B3
L3E5	B3
L3E6	B4
L8E1	D1
L8E2	D1
L8E3	D2
L8E4	C4

TRANSISTORS	
Q3E1	C1
Q3E2	C2
Q3E3	C2
Q3E4	C3
Q3E5	C3
Q3E6	B4
Q8E1	D2
Q8E2	D3
Q8E3	D3

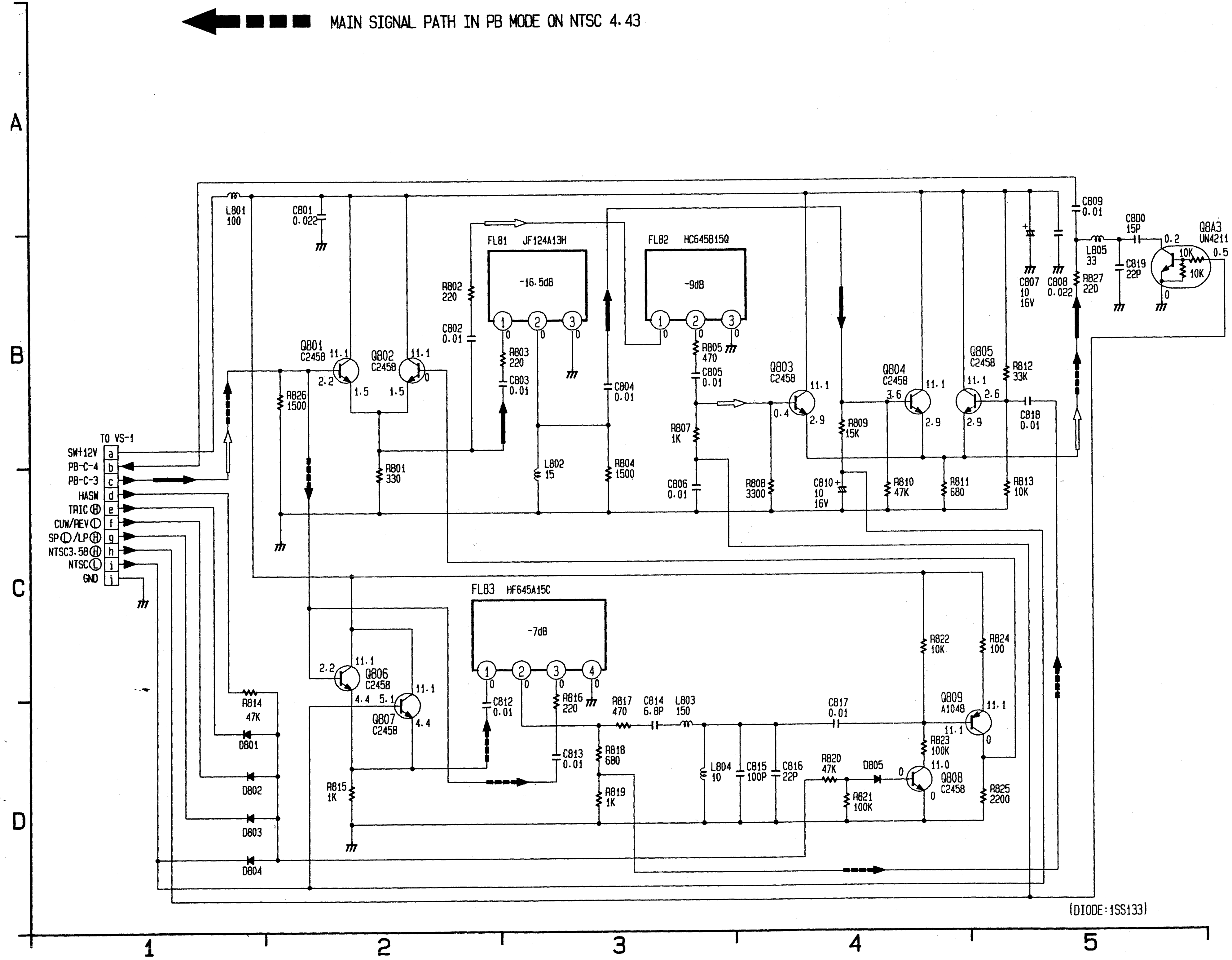
RESISTORS	
R3E1	B1
R3E2	C1
R3E3	C1
R3E4	B2
R3E5	C2
R3E6	B2
R3E7	B2
R3E8	B3
R3E9	B3
R3F0	C4
R8E1	D1
R8E2	C2
R8E3	D2
R8E4	C2
R8E5	D2
R8E6	D3
R8E7	C3
R8E8	D3

CHROMINANCE SCHEMATIC DIAGRAM (VS-3) PM02

MAIN SIGNAL PATH IN PB MODE ON PAL

MAIN SIGNAL PATH IN PB MODE ON NTSC 4.43

MAIN SIGNAL PATH IN PB MODE ON NTSC 3.58


A
B
C
D
1
2
3
4
5
TO VS-1
SW+12V a
PB-C-4 b
PB-C-3 c
HASW d
TRIC Ⓗ e
CUW/REV Ⓛ f
SP Ⓛ/LP Ⓗ g
NTSC3.58 Ⓗ h
NTSC Ⓛ i
GND j
L801 100
C801 0.022
FL81 JF124A13H
-16.5dB
FL82 HC6458150
-9dB
R802 220
C802 0.01
Q801 C2458
Q802 C2458
R826 1500
R801 330
R803 220
C803 0.01
L802 15
C804 0.01
R804 1500
R805 470
C805 0.01
R807 1K
C806 0.01
R808 3300
Q803 C2458
R809 15K
C810 10 16V
Q804 C2458
Q805 C2458
R810 47K
R811 680
R812 33K
C818 0.01
R813 10K
C807 10 16V
C808 0.022
R827 220
C809 0.01
L805 33
C8D0 15P
C819 22P
Q8A3 UN4211
10K
10K
FL83 HF645A15C
-7dB
Q806 C2458
Q807 C2458
R814 47K
D801
D802
D803
D804
R815 1K
C812 0.01
R816 220
C813 0.01
R817 470
C814 6.8P
L803 150
R818 680
R819 1K
L804 10
C815 100P
C816 22P
C817 0.01
R820 47K
D805
R821 100K
R822 10K
R824 100
Q809 A1048
R823 100K
Q808 C2458
R825 2200
(DIODE:1SS133)

CAPACITORS	
C801	A2
C802	B2
C803	B3
C804	B3
C805	B3
C806	C3
C807	B5
C808	B5
C809	A5
C810	C4
C812	D2
C813	D3
C814	D3
C815	D4
C816	D4
C817	D4
C818	B5
C819	B5
C8D0	B5

DIODES	
D801	D1
D802	D1
D803	D1
D804	D1
D805	D4

FILTERS	
FL81	B3
FL82	B3
FL83	C3

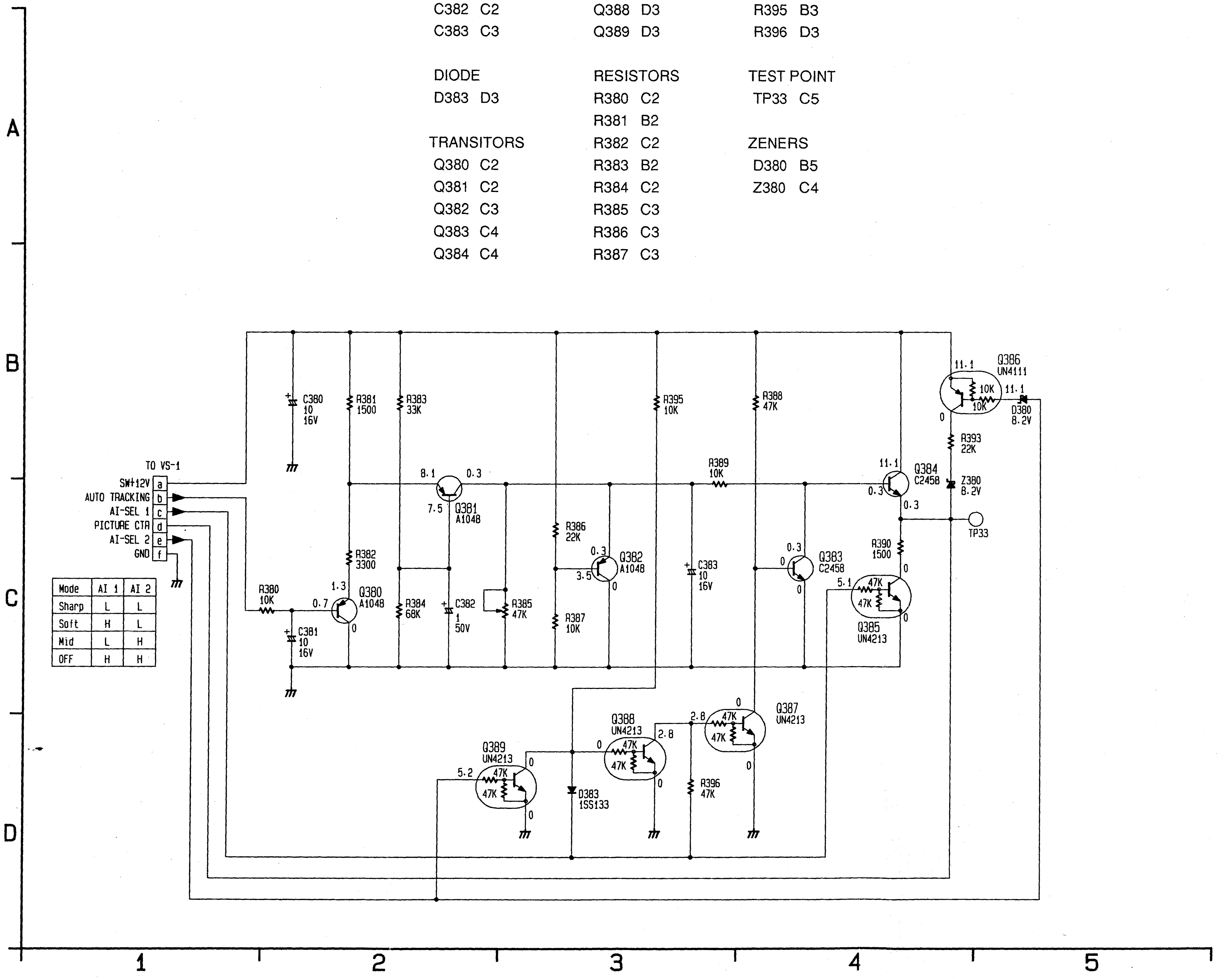
COILS	
L801	A1
L802	C3
L803	D3
L804	D3
L805	B5

TRANSISTORS	
Q801	B2
Q802	B2
Q803	B4
Q804	B4
Q805	B5
Q806	C2
Q807	D2
Q808	D4
Q809	D5
Q8A3	B5

RESISTORS	
R801	C2
R802	B2
R803	B3
R804	C3
R805	B3
R807	B3
R808	C4
R809	B4
R810	C4
R811	C4
R812	B5
R813	C5
R814	C1
R815	D2
R816	C3
R817	D3
R818	D3
R819	D3
R820	D4
R821	D4
R822	C4
R823	D4
R824	C5
R825	D5
R826	B2
R827	B5

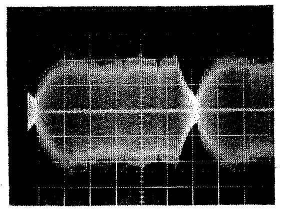
AI PICTURE SCHEMATIC DIAGRAM (VS-4) PM02

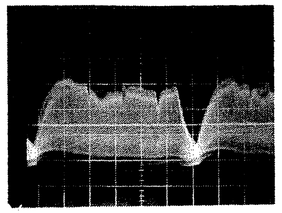
CAPACITORS	
C380	B2
C381	C2
C382	C2
C383	C3
DIODE	
D383	D3
TRANSITORS	
Q380	C2
Q381	C2
Q382	C3
Q383	C4
Q384	C4
Q385	C4
Q386	B5
Q387	D3
Q388	D3
Q389	D3
RESISTORS	
R380	C2
R381	B2
R382	C2
R383	B2
R384	C2
R385	C3
R386	C3
R387	C3
R388	B4
R390	C4
R393	B4
R395	B3
R396	D3
TEST POINT	
TP33	C5
ZENERS	
D380	B5
Z380	C4

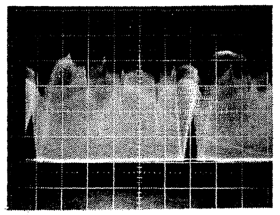

A
B
C
D
1
2
3
4
5
TO VS-1
SW+12V a
AUTO TRACKING b
AI-SEL 1 c
PICTURE CTR d
AI-SEL 2 e
GND f
C380 10 16V
R381 1500
R383 33K
R395 10K
R388 47K
Q386 UN4111
11.1
10K
10K
11.1
0
D380 8.2V
R393 22K
8.1
0.3
7.5
Q381 A1048
R389 10K
11.1
Q384 C2458
0.3
0.3
Z380 8.2V
TP33
R382 3300
R386 22K
0.3
3.5
Q382 A1048
0
C383 10 16V
0.3
0
Q383 C2458
0
R390 1500
0
5.1
47K
47K
0
Q385 UN4213
R380 10K
0.7
1.3
Q380 A1048
0
C381 10 16V
R384 68K
C382 1 50V
R385 47K
R387 10K
Q389 UN4213
5.2
47K
47K
0
0
D383 1SS133
Q388 UN4213
0
47K
47K
2.8
0
R396 47K
2.8
47K
47K
0
0
Q387 UN4213

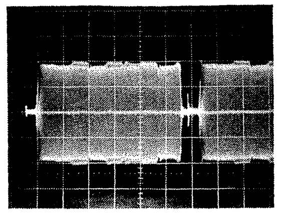
Mode	AI 1	AI 2
Sharp	L	L
Soft	H	L
Mid	L	H
OFF	H	H

PM02 (VS-5)


⑳ Pin5 SECAM SP PB
0.1V/Div 10µsec/Div


㉑ Pin16 SECAM SP PB
0.2V/Div 10µsec/Div


㉒ Pin8 SECAM SP PB
0.1V/Div 10µsec/Div

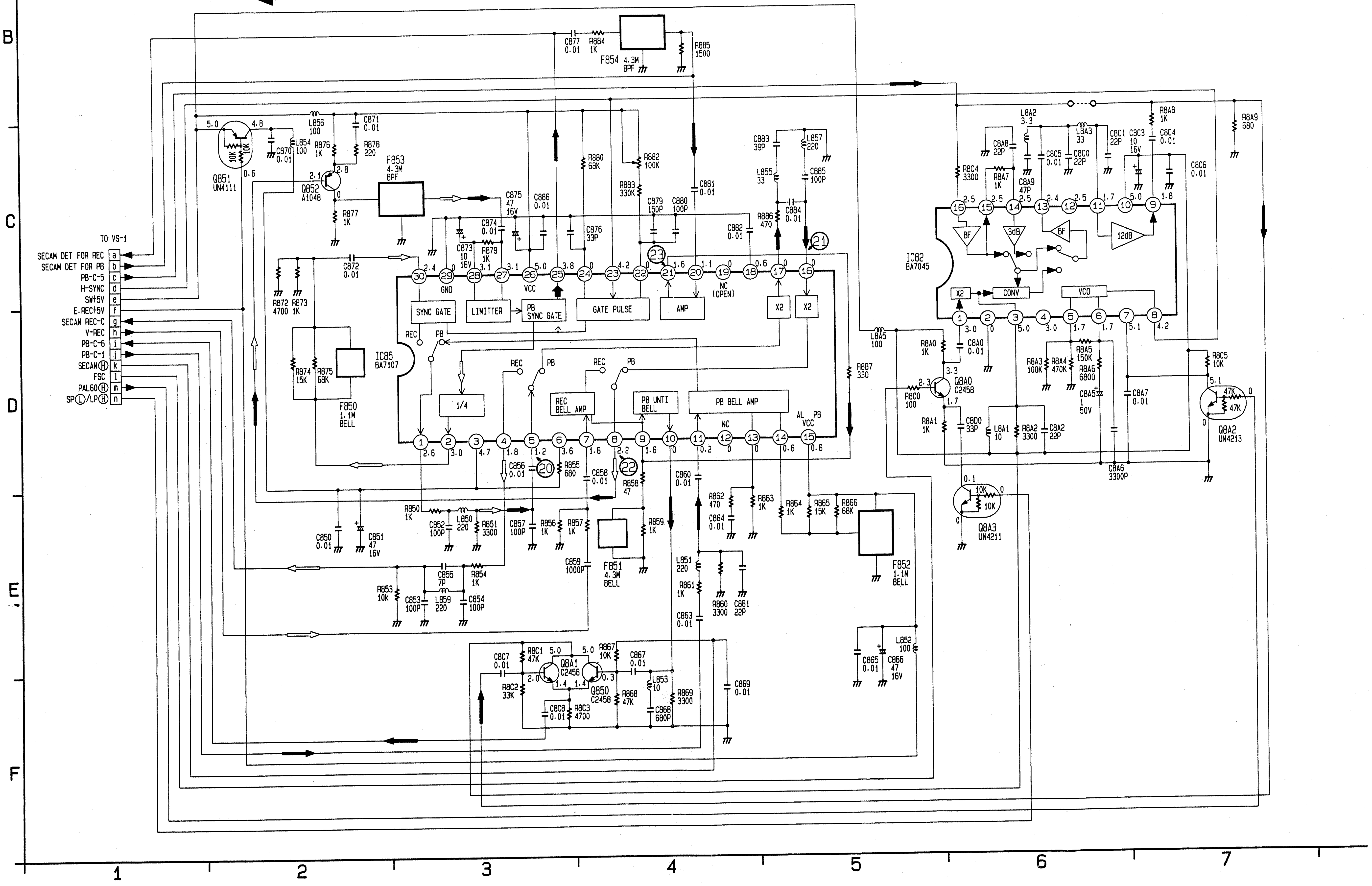

㉓ Pin21 SECAM SP PB
0.1V/Div 10µsec/Div

CAPACITORS	
C850	E2
C851	E2
C852	E3
C853	E3
C854	E3
C855	E3
C856	D3
C857	E3
C858	D4
C859	E4
C860	D4
C861	E4
C863	E4
C864	E4
C865	E5
C866	E5
C867	E4
C868	F4
C869	F4
C870	C2
C871	C2
C872	C2
C873	C3
C874	C3
C875	C3
C876	C4
C877	B4
C879	C4
C880	C4
C881	C4
C882	C4
C883	C5
C884	C5
C885	C5
C886	C3
C8A0	D6
C8A2	D6
C8A5	D6
C8A6	D6
C8A7	D7
C8A8	C6
C8A9	C6
C8C0	C6
C8C1	C6
C8C3	C7
C8C4	C7
C8C5	C6
C8C6	C7
C8C7	E3
C8C8	F3
C8D0	D6
ICs	
IC82	C6
IC85	D3
COILS	
L850	E3
L851	E4
L852	E5
L853	F4
L854	C2
L855	C5
L856	B2
L857	C5
L859	E3
L8A1	D6
L8A2	C6
L8A3	C6
L8A5	D5
L8A9	C6
TRANSISTORS	
Q850	E4
Q851	C2
Q852	C2
Q8A0	D5
Q8A1	E3
Q8A2	D7
Q8A3	E6
RESISTORS	
R850	E3
R851	E3
R853	E3
R854	E3
R855	D3
R856	E3
R857	E4
R858	D4
R859	E4
R860	E4
R861	E4
R862	E4
R863	E4
R864	E5
R865	E5
R866	E5
R867	E4
R868	F4
R869	F4
R872	C2
R873	C2
R874	D2
R875	D2
R876	C2
R877	C2
R878	C2
R879	C3
R880	C4
R882	C4
R883	C4
R884	B4
R885	B4
R886	C5
R887	D5
R8A0	D6
R8A1	D6
R8A2	D6
R8A3	D6
R8A4	D6
R8A5	D6
R8A6	D6
R8A7	C6
R8A8	C7
R8A9	C7
R8C0	D5
R8C1	E3
R8C2	F3
R8C3	F3
R8C4	C6
R8C5	D7
OTHERS	
F850	D2
F851	E4
F852	E5
F853	C3
F854	B4

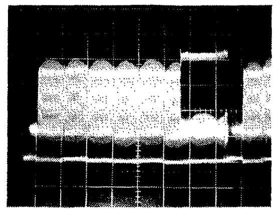
SECAM AND NTSC TO PAL CONVERTOR SCHEMATIC DIAGRAM (VS-5) PM02

⇦ MAIN SIGNAL PATH IN REC MODE

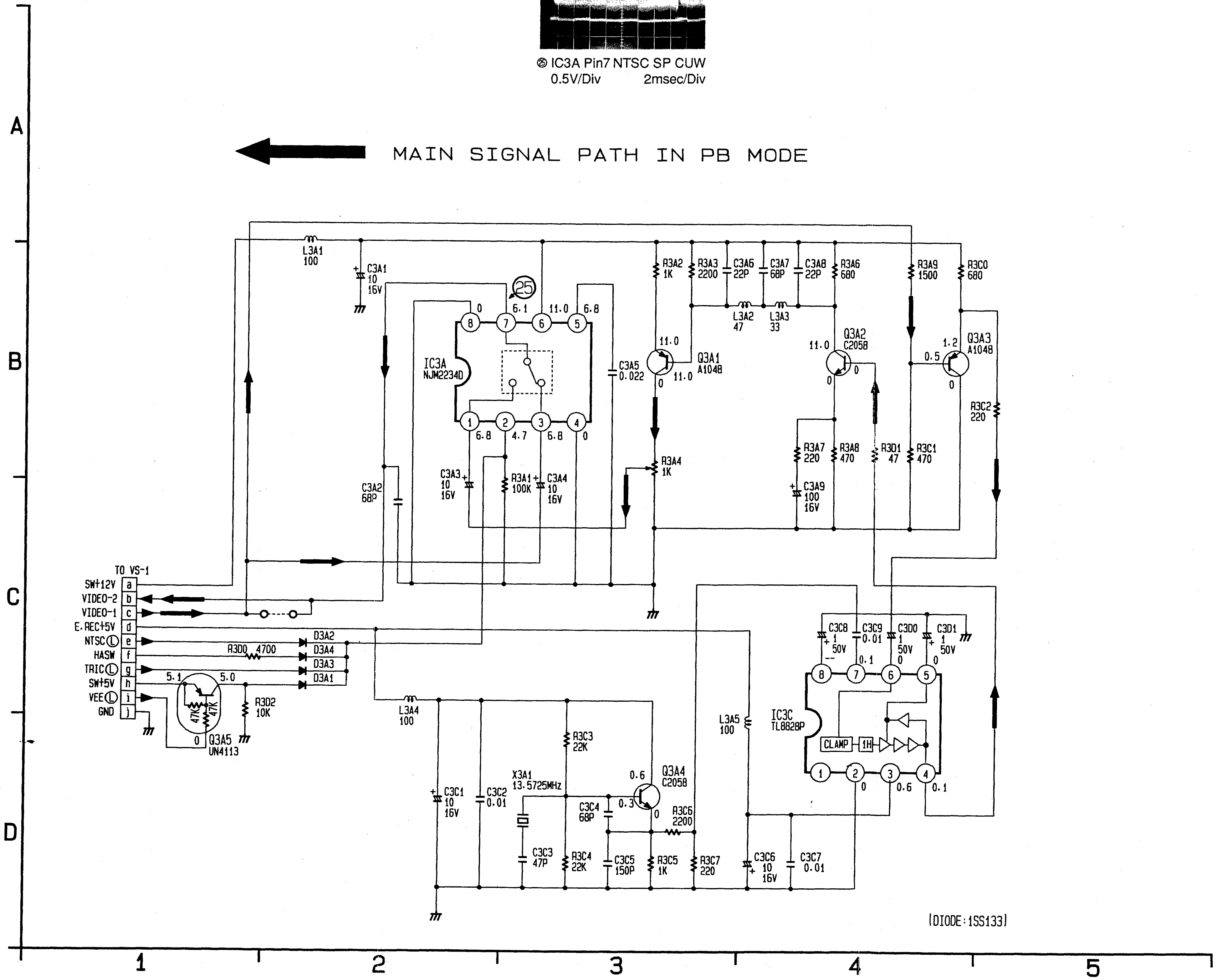
⬅ MAIN SIGNAL PATH IN PB MODE


B
C
D
E
F
1
2
3
4
5
6
7
TO VS-1
SECAM DET FOR REC a
SECAM DET FOR PB b
PB-C-5 c
H-SYNC d
SW+5V e
E.REC+5V f
SECAM REC-C g
V-REC h
PB-C-6 i
PB-C-1 j
SECAM(H) k
FSC l
PAL60(H) m
SP(L)/LP(H) n
Q851 UN4111
Q852 A1048
L856 100
C871 0.01
C870 0.01
L854 100
R876 1K
R878 220
R877 1K
F853 4.3M BPF
C877 0.01
R884 1K
F854 4.3M BPF
R885 1500
C875 47 16V
C886 0.01
C874 0.01
C873 10 16V
R879 1K
C876 33P
R880 68K
R882 100K
R883 330K
C879 150P
C880 100P
C881 0.01
C883 39P
L857 220
L855 33
C885 100P
R886 470
C884 0.01
C882 0.01
C872 0.01
R872 4700
R873 1K
R874 15K
R875 68K
F850 1.1M BELL
IC85 BA7107
SYNC GATE
LIMITTER
PB SYNC GATE
GATE PULSE
AMP
X2
X2
GND
VCC
NC (OPEN)
REC
PB
1/4
REC BELL AMP
PB UNTI BELL
PB BELL AMP
AL VCC
PB
NC
R850 1K
L850 220
C852 100P
R851 3300
C857 100P
R856 1K
R857 1K
C856 0.01
R855 680
C858 0.01
R858 47
R859 1K
C850 0.01
C851 47 16V
C859 1000P
F851 4.3M BELL
C860 0.01
R862 470
R863 1K
C864 0.01
R864 1K
R865 15K
R866 68K
F852 1.1M BELL
L851 220
R861 1K
R860 3300
C861 22P
C863 0.01
C855 7P
R854 1K
R853 10k
C853 100P
L859 220
C854 100P
R887 330
L8A5 100
C8C7 0.01
R8C1 47K
Q8A1 C2458
Q850 C2458
R8C2 33K
C8C8 0.01
R8C3 4700
R867 10K
C867 0.01
L853 10
R868 47K
C868 680P
R869 3300
C869 0.01
L852 100
C865 0.01
C866 47 16V
IC82 BA7045
L8A2 3.3
L8A3 33
C8A8 22P
C8C5 0.01
C8C0 22P
C8C1 22P
C8C3 10 16V
C8C4 0.01
R8A8 1K
R8A9 680
C8C6 0.01
R8C4 3300
R8A7 1K
C8A9 47P
BF
3dB
BF
12dB
X2
CONV
VCO
R8A0 1K
C8A0 0.01
Q8A0 C2458
R8C0 100
R8A1 1K
C8D0 33P
L8A1 10
R8A2 3300
C8A2 22P
R8A3 100K
R8A4 470K
R8A5 150K
R8A6 6800
C8A5 1 50V
C8A7 0.01
C8A6 3300P
R8C5 10K
Q8A2 UN4213
Q8A3 UN4211
10K
47K

0. 32 SKEW FOR NTSC SCHEMATIC DIAGRAM (VS-6) PM02



㉕ IC3A Pin7 NTSC SP CUW
0.5V/Div 2msec/Div


MAIN SIGNAL PATH IN PB MODE
A
B
C
D
1
2
3
4
5
TO VS-1
SW+12V a
VIDEO-2 b
VIDEO-1 c
E.REC+5V d
NTSC Ⓛ e
HASW f
TRIC Ⓛ g
SW+5V h
VEE Ⓛ i
GND j
L3A1 100
C3A1 10 16V
IC3A NJM2234D
C3A5 0.022
C3A2 68P
C3A3 10 16V
R3A1 100K
C3A4 10 16V
R3A2 1K
R3A3 2200
C3A6 22P
C3A7 68P
C3A8 22P
R3A6 680
L3A2 47
L3A3 33
Q3A1 A1048
Q3A2 C2058
R3A4 1K
R3A7 220
R3A8 470
R3D1 47
R3C1 470
C3A9 100 16V
R3A9 1500
R3C0 680
Q3A3 A1048
R3C2 220
R3D0 4700
D3A2
D3A4
D3A3
D3A1
Q3A5 UN4113
R3D2 10K
L3A4 100
C3C1 10 16V
C3C2 0.01
X3A1 13.5725MHz
C3C3 47P
R3C3 22K
R3C4 22K
C3C4 68P
C3C5 150P
Q3A4 C2058
R3C5 1K
R3C6 2200
R3C7 220
L3A5 100
C3C6 10 16V
C3C7 0.01
IC3C TL8828P
CLAMP
1H
C3C8 1 50V
C3C9 0.01
C3D0 1 50V
C3D1 1 50V
(DIODE: 1SS133)

CAPACITORS	
C3A1	B2
C3A2	C2
C3A3	C2
C3A4	C3
C3A5	B2
C3A6	B3
C3A7	B4
C3A8	B4
C3A9	C4
C3C1	D2
C3C2	D2
C3C3	D3
C3C4	D3
C3C5	D3
C3C6	D4
C3C7	D4
C3C8	C4
C3C9	C4
C3D0	C4
C3D1	C4

DIODES	
D3A1	C2
D3A2	C2
D3A3	C2
D3A4	C2

ICs	
IC3A	B3
IC3C	D4

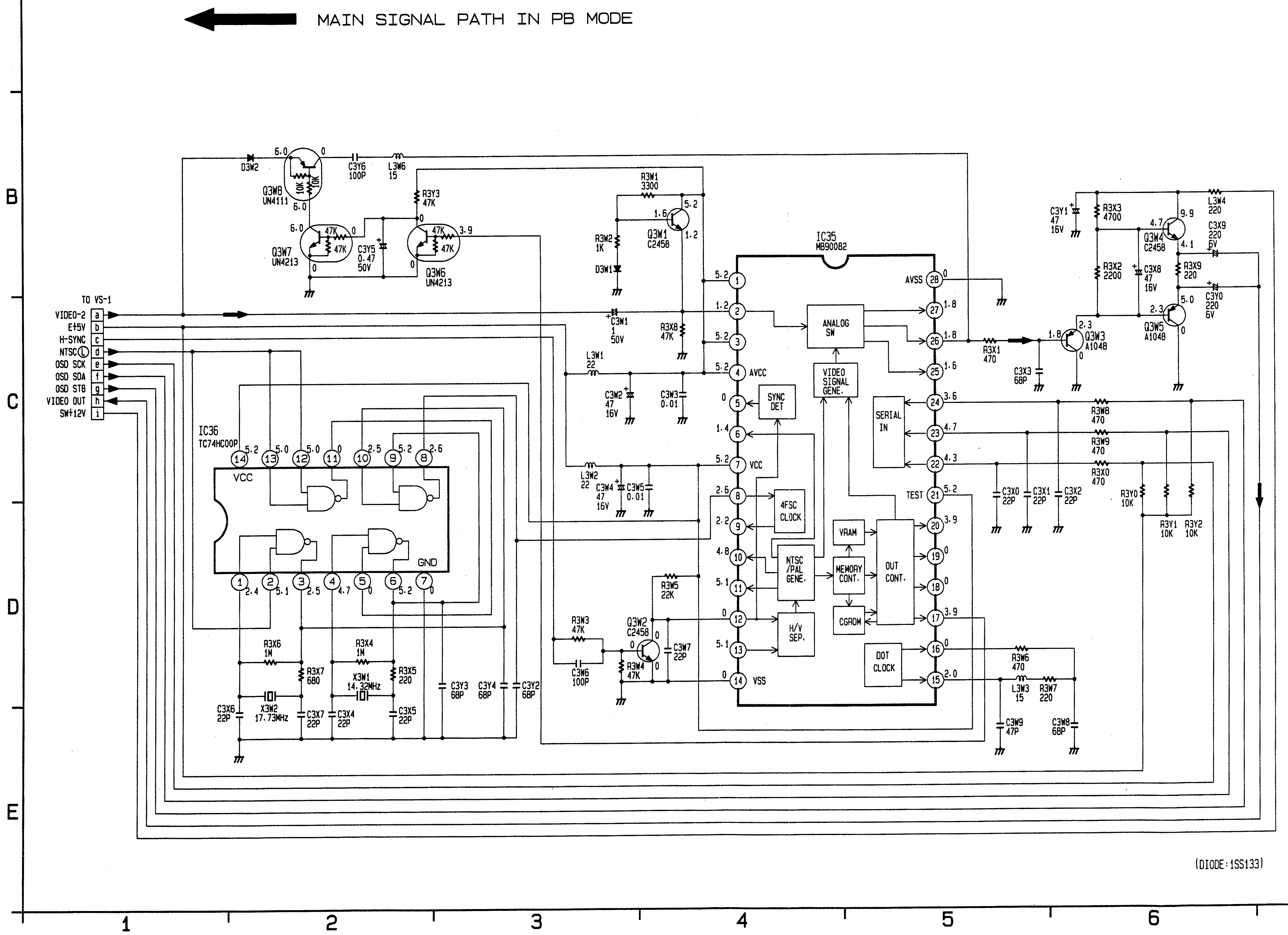
COILS	
L3A1	A2
L3A2	B4
L3A3	B4
L3A4	C2
L3A5	D4

TRANSISTORS	
Q3A1	B3
Q3A2	B4
Q3A3	B4
Q3A4	D3
Q3A5	C1

RESISTORS	
R3A1	C3
R3A2	B3
R3A3	B3
R3A4	B3
R3A6	B4
R3A7	B4
R3A8	B4
R3A9	B4
R3C0	B4
R3C1	B4
R3C2	B5
R3C3	D3
R3C4	D3
R3C5	D3
R3C6	D3
R3C7	D3
R3D0	C1
R3D1	B4
R3D2	C1

X'TAL	
X3A1	D3

ON SCREEN DISPLAY SCHEMATIC DIAGRAM (VS-7) PM02


MAIN SIGNAL PATH IN PB MODE
A
B
C
D
E
1
2
3
4
5
6
7
TO VS-1
VIDEO-2 a
E+5V b
H-SYNC c
NTSC(L) d
OSD SCK e
OSD SDA f
OSD STB g
VIDEO OUT h
SW+12V i
IC35
MB90082
IC36
TC74HC00P
VCC
GND
AVSS
AVCC
VCC
VSS
TEST
ANALOG SW
VIDEO SIGNAL GENE.
SYNC DET
SERIAL IN
4FSC CLOCK
NTSC /PAL GENE.
VRAM
MEMORY CONT.
OUT CONT.
CGROM
H/V SEP.
DOT CLOCK
D3W2
Q3W8 UN4111
Q3W7 UN4213
Q3W6 UN4213
C3Y6 100P
L3W6 15
R3Y3 47K
C3Y5 0.47 50V
R3W1 3300
Q3W1 C2458
R3W2 1K
D3W1
C3W1 1 50V
R3X8 47K
L3W1 22
C3W2 47 16V
C3W3 0.01
L3W2 22
C3W4 47 16V
C3W5 0.01
R3W5 22K
R3W3 47K
Q3W2 C2458
C3W7 22P
C3W6 100P
R3W4 47K
R3X6 1M
R3X7 680
R3X4 1M
X3W1 14.32MHz
R3X5 220
C3X6 22P
X3W2 17.73MHz
C3X7 22P
C3X4 22P
C3X5 22P
C3Y3 68P
C3Y4 68P
C3Y2 68P
C3Y1 47 16V
R3X3 4700
Q3W4 C2458
L3W4 220
C3X9 220 6V
R3X2 2200
C3X8 47 16V
R3X9 220
Q3W5 A1048
C3Y0 220 6V
R3X1 470
Q3W3 A1048
C3X3 68P
R3W8 470
R3W9 470
R3X0 470
C3X0 22P
C3X1 22P
C3X2 22P
R3Y0 10K
R3Y1 10K
R3Y2 10K
R3W6 470
L3W3 15
R3W7 220
C3W9 47P
C3W8 68P
(DIODE:1SS133)

CAPACITORS	
C3W1	C3
C3W2	C3
C3W3	C4
C3W4	C3
C3W5	C4
C3W6	D3
C3W7	D4
C3W8	E6
C3W9	E5
C3X0	C5
C3X1	C5
C3X2	C6
C3X3	C5
C3X4	E2
C3X5	E2
C3X6	E2
C3X7	E2
C3X8	B6
C3X9	B6
C3Y0	C6
C3Y1	B6
C3Y2	D3
C3Y3	D3
C3Y4	D3
C3Y5	B2
C3Y6	B2

DIODES	
D3W1	B3
D3W2	B2

ICs	
IC35	C4
IC36	D2

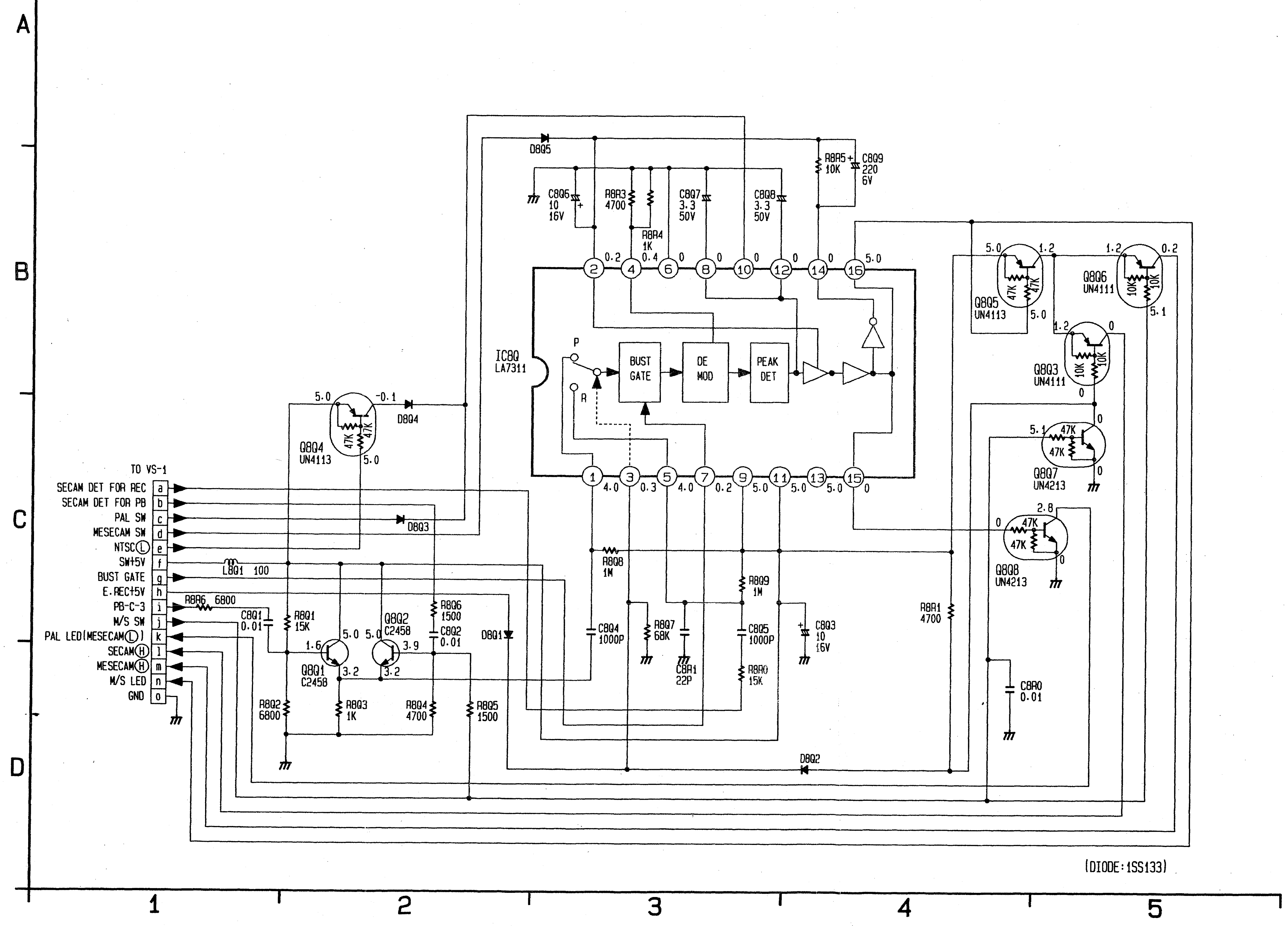
COILS	
L3W1	C3
L3W2	C3
L3W3	D5
L3W6	B2

TRANSISTORS	
Q3W1	B4
Q3W2	D4
Q3W3	C6
Q3W4	B6
Q3W5	C6
Q3W6	B3
Q3W8	B2
Q3W9	B2

RESISTORS	
L3W4	B6
R3W1	B4
R3W2	B3
R3W3	D3
R3W4	D3
R3W5	D4
R3W6	D5
R3W7	D5
R3W8	C6
R3W9	C6
R3X0	C6
R3X1	C5
R3X2	B6
R3X3	B6
R3X4	D2
R3X5	D2
R3X6	D2
R3X7	D2
R3X8	C4
R3X9	B6
R3Y0	C6
R3Y1	C6
R3Y2	C6
R3Y3	B2

X'TALS	
X3W1	D2
X3W2	D2

SECAM DETECTOR SCHEMATIC DIAGRAM (VS-8) PM02


A
B
C
D
1
2
3
4
5
TO VS-1
SECAM DET FOR REC a
SECAM DET FOR PB b
PAL SW c
MESECAM SW d
NTSC Ⓛ e
SW+5V f
BUST GATE g
E.REC+5V h
PB-C-3 i
M/S SW j
PAL LED(MESECAM Ⓛ) k
SECAM Ⓗ l
MESECAM Ⓗ m
M/S LED n
GND o
IC8Q
LA7311
P
R
BUST GATE
DE MOD
PEAK DET
Q8Q4
UN4113
Q8Q5
UN4113
Q8Q6
UN4111
Q8Q3
UN4111
Q8Q7
UN4213
Q8Q8
UN4213
Q8Q1
C2458
Q8Q2
C2458
47K
10K
D8Q1
D8Q2
D8Q3
D8Q4
D8Q5
L8Q1 100
R8R6 6800
C8Q1 0.01
R8Q1 15K
R8Q2 6800
R8Q3 1K
R8Q4 4700
R8Q5 1500
R8Q6 1500
C8Q2 0.01
C8Q6 10 16V
R8R3 4700
R8R4 1K
C8Q7 3.3 50V
C8Q8 3.3 50V
R8R5 10K
C8Q9 220 6V
R8Q8 1M
C8Q4 1000P
R8Q7 68K
C8R1 22P
R8Q9 1M
C8Q5 1000P
R8R0 15K
C8Q3 10 16V
R8R1 4700
C8R0 0.01
(DIODE:1SS133)

CAPACITORS	
C8Q1	C1
C8Q2	C2
C8Q3	C4
C8Q4	C3
C8Q5	C3
C8Q6	B3
C8Q7	B3
C8Q8	B3
C8Q9	B4
C8R0	D4
C8R1	C3

DIODES	
D8Q1	C2
D8Q2	D4
D8Q3	C2
D8Q4	C2
D8Q5	A2

IC	
IC8Q	B3

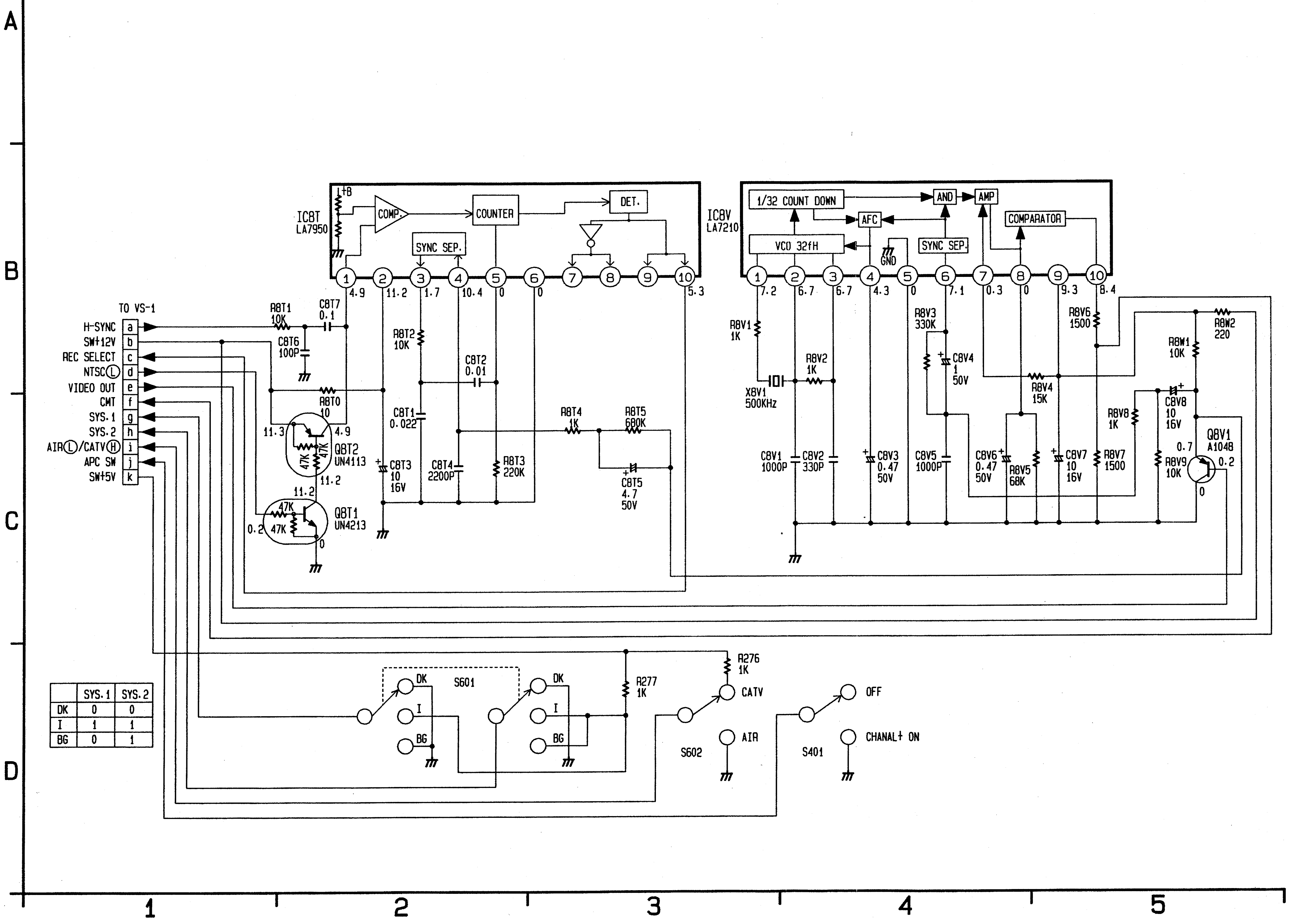
COIL	
L8Q1	C1

TRANSISTORS	
Q8Q1	D2
Q8Q2	D2
Q8Q3	B5
Q8Q4	C2
Q8Q5	B5
Q8Q6	B5
Q8Q7	C5
Q8Q8	C5

RESISTORS	
R8Q1	C2
R8Q2	D2
R8Q3	D2
R8Q4	D2
R8Q5	D2
R8Q6	C2
R8Q7	C3
R8Q8	C3
R8Q9	C3
R8R0	D3
R8R1	C4
R8R3	B3
R8R4	B3
R8R5	B4
R8R6	C1

NTSC DETECTOR AND SYNC DETECTOR SCHEMATIC DIAGRAM

(VS-9) PM02


A
B
C
D
1
2
3
4
5
IC8T
LA7950
+B
COMP.
COUNTER
DET.
SYNC SEP.
IC8V
LA7210
1/32 COUNT DOWN
AND
AMP
AFC
COMPARATOR
VCO 32fH
GND
SYNC SEP.
TO VS-1
H-SYNC a
SW+12V b
REC SELECT c
NTSC(L) d
VIDEO OUT e
CMT f
SYS.1 g
SYS.2 h
AIR(L)/CATV(H) i
APC SW j
SW+5V k
R8T1 10K
C8T7 0.1
C8T6 100P
R8T0 10
R8T2 10K
C8T2 0.01
C8T1 0.022
C8T3 10 16V
C8T4 2200P
R8T3 220K
R8T4 1K
R8T5 680K
C8T5 4.7 50V
Q8T2 UN4113
Q8T1 UN4213
47K
R8V1 1K
X8V1 500KHz
R8V2 1K
R8V3 330K
C8V4 1 50V
R8V4 15K
R8V6 1500
R8W1 10K
R8W2 220
C8V1 1000P
C8V2 330P
C8V3 0.47 50V
C8V5 1000P
C8V6 0.47 50V
R8V5 68K
C8V7 10 16V
R8V7 1500
R8V8 1K
C8V8 10 16V
R8V9 10K
Q8V1 A1048
S601
DK
I
BG
R277 1K
R276 1K
CATV
AIR
S602
OFF
CHANAL+ ON
S401

	SYS.1	SYS.2
DK	0	0
I	1	1
BG	0	1

CAPACITORS	
C8T1	C2
C8T2	B2
C8T3	C2
C8T4	C2
C8T5	C3
C8T6	B2
C8T7	B2
C8V1	C4
C8V2	C4
C8V3	C4
C8V4	B4
C8V5	C4
C8V6	C4
C8V7	C5
C8V8	C5

ICs	
IC8T	B2
IC8V	B4

TRANSISTORS	
Q8T1	C2
Q8T2	C2
Q8V1	C5

RESISTORS	
R276	D3
R277	D3
R8T0	B2
R8T1	B2
R8T2	B2
R8T3	C2
R8T4	C3
R8T5	C3
R8V1	B3
R8V2	B4
R8V3	B4
R8V4	B5
R8V5	C5
R8V6	B5
R8V7	C5
R8V8	C5
R8V9	C5
R8W1	B5
R8W2	B5

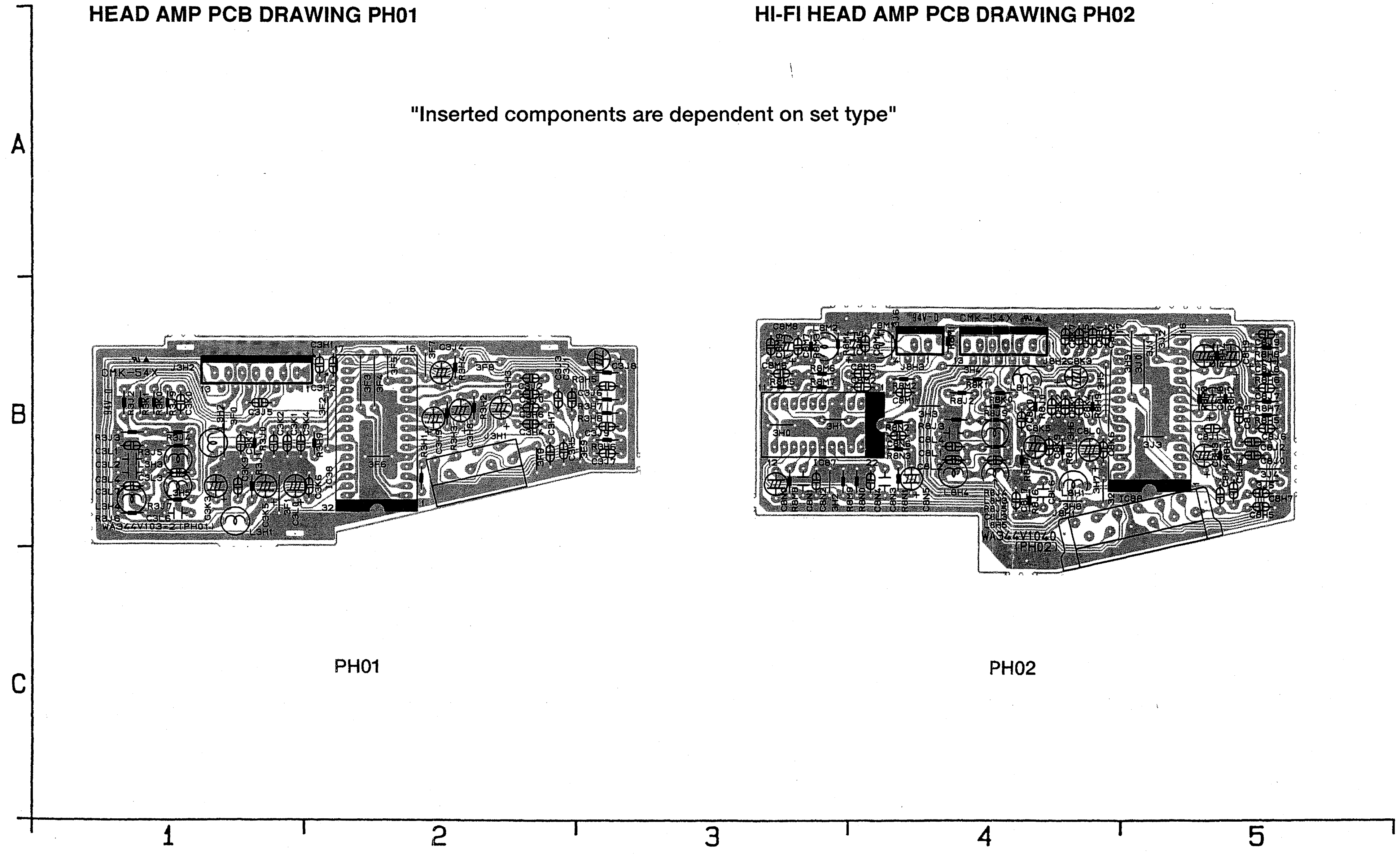
SWITCHES	
S401	D4
S601	D2
S602	D3

X'TAL	
X8V1	B3

HEAD AMP PCB DRAWING PH01

HI-FI HEAD AMP PCB DRAWING PH02

"Inserted components are dependent on set type"



PH01

CAPACITORS	
C3H1	B2
C3H2	B2
C3H3	B2
C3H4	B2
C3H5	B2
C3H6	B2
C3H7	B2
C3H8	B2
C3H9	B2
C3J0	B2
C3J1	B2
C3J2	B2
C3J3	B2
C3J4	B2
C3J5	B1
C3J6	B3
C3J7	B3
C3J8	B3
C3J9	B3
C3K0	B1
C3K1	B1
C3K2	B1
C3K3	B1
C3K4	B1
C3K5	B1
C3K6	B2
C3K7	B1
C3K9	B1
C3L0	B1
C3L1	B1
C3L2	B1
C3L3	B1
C3L4	B1
C3L6	B1
C3L7	B1

IC	
IC38	B2

CONNECTORS	
J3H1	B2
J3H2	B1

COILS	
L3H1	B1
L3H2	B1
L3H3	B1
L3H4	B1
L3H5	B1

RESISTORS	
R3H1	B2
R3H2	B2
R3H3	B2
R3H4	B2
R3H5	B3
R3H6	B3
R3H7	B3
R3H8	B3
R3H9	B2
R3J0	B1
R3J1	B1
R3J2	B1
R3J3	B1
R3J4	B1
R3J5	B1
R3J6	B1
R3J7	B1
R3J9	B1
R3K0	B1
R3K1	B1

PH02

CAPACITORS	
C8H1	B4
C8H2	B4
C8H3	B5
C8H4	B5
C8H5	B5
C8H6	B5
C8H7	B5
C8H8	B5
C8H9	B5
C8J0	B5
C8J1	B5
C8J2	B5
C8J3	B5
C8J4	B5
C8J5	B4
C8J6	B5
C8J7	B5
C8J8	B5
C8J9	B5
C8K0	B4
C8K1	B4
C8K2	B4
C8K3	B4
C8K4	B4
C8K5	B4
C8K6	B4
C8K7	B4
C8K9	B4
C8L1	B4
C8L2	B4
C8L3	B4
C8L4	B4
C8L6	B4
C8L7	B4
C8M1	B4
C8M2	B4
C8M3	B4
C8M4	B4
C8M5	B4
C8M6	B3
C8M7	B3
C8M8	B3
C8M9	B3
C8N0	B3
C8N1	B3
C8N2	B3
C8N3	B4
C8N4	B4
C8N5	B4
C8N6	B4

ICs	
IC87	B3
IC88	B5

CONNECTORS	
J8H1	B4
J8H2	B4
J8H3	B4

COILS	
L8H1	B4
L8H2	B4
L8H3	B4
L8H4	B4
L8H5	B4
L8M1	B4
L8M2	B3

RESISTORS	
R8H1	B5
R8H2	B5
R8H3	B5
R8H4	B5
R8H5	B5
R8H6	B5
R8H7	B5
R8H8	B5
R8H9	B4
R8J0	B4
R8J1	B4
R8J2	B4
R8J3	B4
R8J4	B4
R8J5	B4
R8J6	B4
R8J7	B4
R8J9	B4
R8K0	B4
R8K1	B4
R8M1	B4
R8M2	B4
R8M3	B3
R8M4	B3
R8M5	B3
R8M6	B3
R8M7	B3
R8M8	B3
R8M9	B3
R8N0	B4
R8N1	B4
R8N2	B4
R8N3	B4

PH01, PH02 (HA-1)

CAPACITORS	
C8H1	D2
C8H2	D3
C8H3	D3
C8H4	D4
C8H5	D3
C8H6	D4
C8H7	D3
C8H8	D3
C8H9	D3
C8J0	D4
C8J1	D4
C8J2	D4
C8J3	D4
C8J4	D4
C8J5	D4
C8J6	C5
C8J7	C5
C8J8	C4
C8J9	C4
C8K0	C4
C8K1	B4
C8K2	B4
C8K3	B4
C8K4	B4
C8K5	C3
C8K6	C3
C8K7	B3
C8K9	C4
C8L0	C3
C8L1	B5
C8L3	B5
C8L4	B5
C8L6	B5

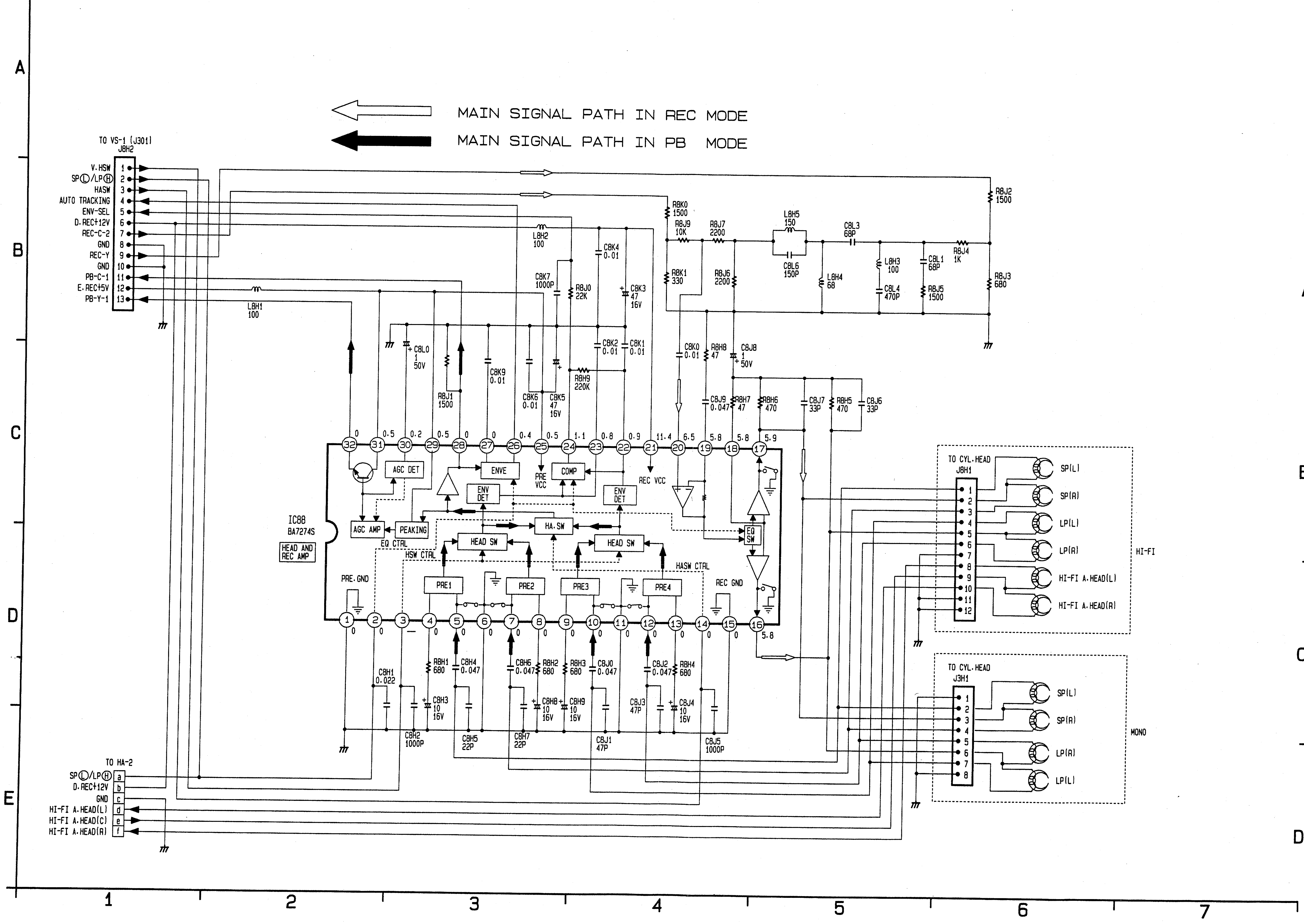
IC	
IC88	C2

CONNECTORS	
J3H1	D6
J8H1	D6
J8H2	A1

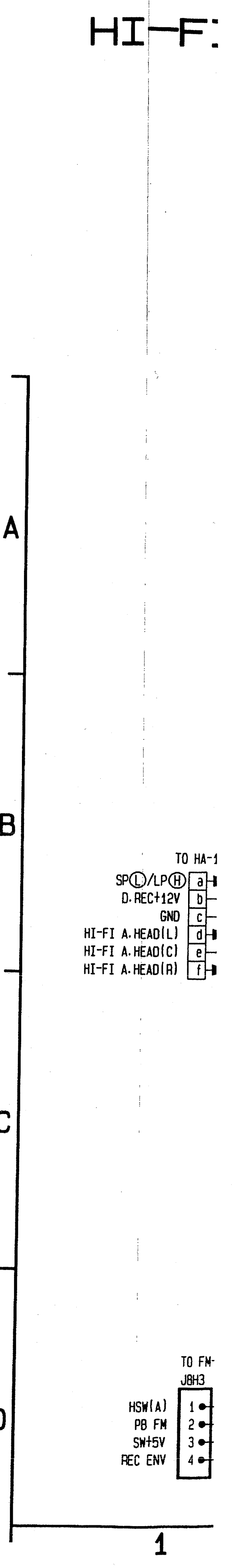
COILS	
L8H1	B2
L8H2	B3
L8H3	B5
L8H4	B5
L8H5	B5

RESISTORS	
R8H1	D3
R8H2	D3
R8H3	D3
R8H4	D4
R8H5	C5
R8H6	C5
R8H7	C4
R8H8	C4
R8H9	C4
R8J0	B3
R8J1	C3
R8J2	B6
R8J3	B6
R8J4	B6
R8J5	B5
R8J6	B4
R8J7	B4
R8J9	B4
R8K0	B4
R8K1	B4

HEAD AMP SCHEMATIC DIAGRAM (HA-1) PH01 PH02



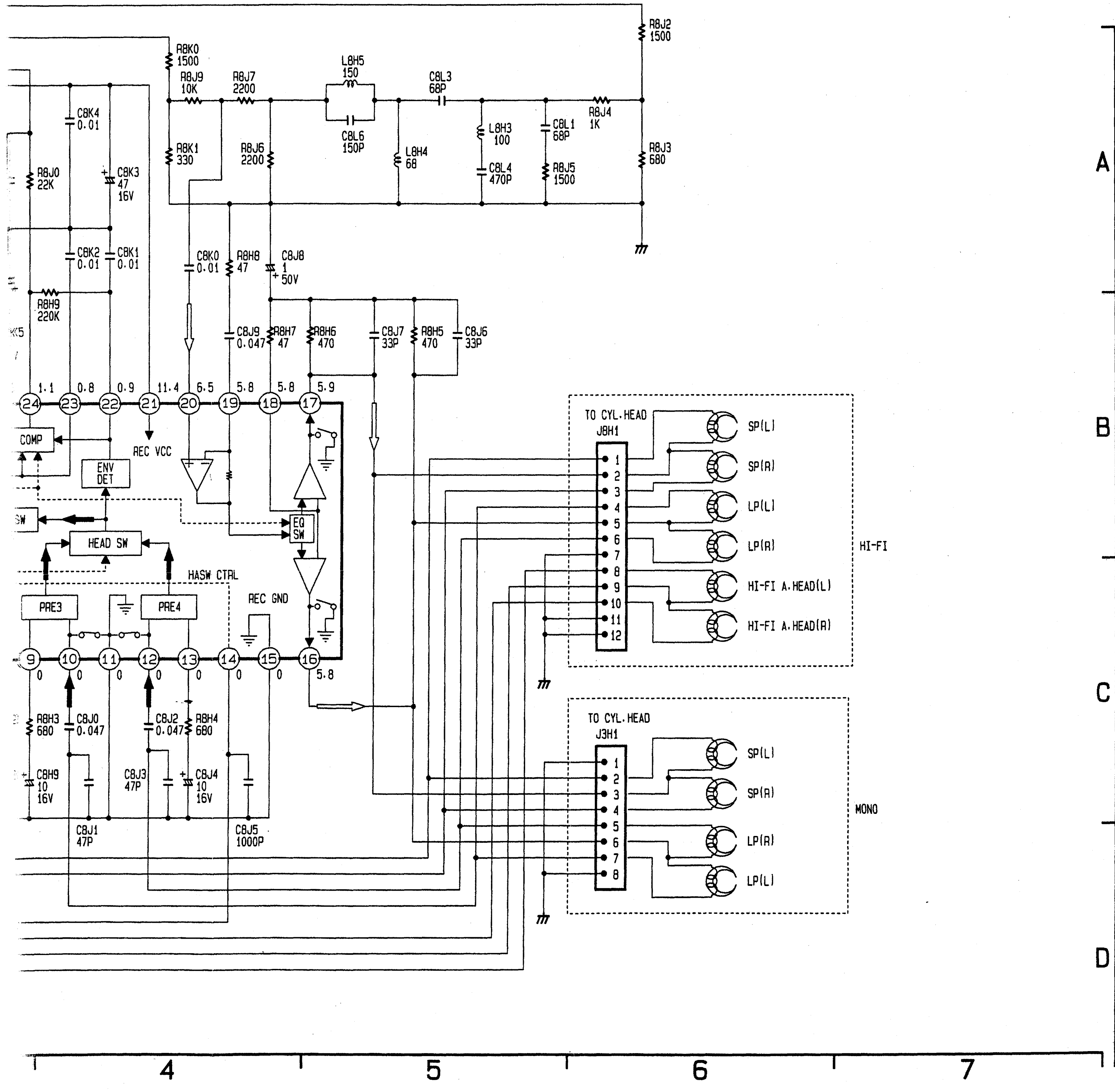
MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PB MODE
TO VS-1 (J301)
J8H2
V.HSW 1
SPⓁ/LPⒽ 2
HASW 3
AUTO TRACKING 4
ENV-SEL 5
D.REC+12V 6
REC-C-2 7
GND 8
REC-Y 9
GND 10
PB-C-1 11
E.REC+5V 12
PB-Y-1 13
L8H1 100
L8H2 100
R8K0 1500
R8J9 10K
R8J7 2200
L8H5 150
C8L6 150P
C8L3 68P
L8H3 100
C8L1 68P
R8J4 1K
R8J2 1500
R8J3 680
R8K1 330
R8J6 2200
L8H4 68
C8L4 470P
R8J5 1500
C8K4 0.01
C8K3 47 16V
C8K7 1000P
R8J0 22K
C8L0 1 50V
R8J1 1500
C8K9 0.01
C8K6 0.01
C8K5 47 16V
R8H9 220K
C8K2 0.01
C8K1 0.01
C8K0 0.01
R8H8 47
C8J8 1 50V
C8J9 0.047
R8H7 47
R8H6 470
C8J7 33P
R8H5 470
C8J6 33P
0 0.5 0.2 0.5 0 0 0.4 0.5 1.1 0.8 0.9 11.4 6.5 5.8 5.8 5.9
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
AGC DET
ENVE
PRE VCC
COMP
REC VCC
ENV DET
ENV DET
IC8B
BA7274S
HEAD AND REC AMP
AGC AMP
PEAKING
EQ CTRL
HA.SW
HEAD SW
HEAD SW
HSW CTRL
HASW CTRL
EQ SW
PRE.GND
REC GND
PRE1
PRE2
PRE3
PRE4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0 0 — 0 0 0 0 0 0 0 0 0 0 0 0 5.8
C8H1 0.022
C8H2 1000P
R8H1 680
C8H4 0.047
C8H3 10 16V
C8H5 22P
C8H6 0.047
R8H2 680
C8H8 10 16V
C8H7 22P
R8H3 680
C8H9 10 16V
C8J0 0.047
C8J1 47P
C8J3 47P
C8J2 0.047
R8H4 680
C8J4 10 16V
C8J5 1000P
TO CYL.HEAD
J8H1
1 2 3 4 5 6 7 8 9 10 11 12
SP(L)
SP(R)
LP(L)
LP(R)
HI-FI A.HEAD(L)
HI-FI A.HEAD(R)
HI-FI
TO CYL.HEAD
J3H1
1 2 3 4 5 6 7 8
SP(L)
SP(R)
LP(R)
LP(L)
MONO
TO HA-2
SPⓁ/LPⒽ a
D.REC+12V b
GND c
HI-FI A.HEAD(L) d
HI-FI A.HEAD(C) e
HI-FI A.HEAD(R) f
A
B
C
D
E
1
2
3
4
5
6
7



HI-F
A
B
C
D
TO HA-1
SPⓁ/LPⒽ a
D.REC+12V b
GND c
HI-FI A.HEAD(L) d
HI-FI A.HEAD(C) e
HI-FI A.HEAD(R) f
TO FM
J8H3
HSW(A) 1
PB FM 2
SW+5V 3
REC ENV 4
1

IAGRAM (HA-1) PH01 PH02

L PATH IN REC MODE
L PATH IN PB MODE


R8K0 1500
R8J9 10K
R8J7 2200
L8H5 150
C8L6 150P
C8L3 68P
L8H4 68
L8H3 100
C8L4 470P
C8L1 68P
R8J5 1500
R8J4 1K
R8J2 1500
R8J3 680
C8K4 0.01
R8J0 22K
C8K3 47 16V
R8K1 330
R8J6 2200
C8K2 0.01
C8K1 0.01
R8H9 220K
C8K0 0.01
R8H8 47
C8J8 1 50V
C8J9 0.047
R8H7 47
R8H6 470
C8J7 33P
R8H5 470
C8J6 33P
COMP
ENV DET
REC VCC
HEAD SW
HASW CTRL
PRE3
PRE4
REC GND
EQ SW
R8H3 680
C8J0 0.047
C8J2 0.047
R8H4 680
C8H9 10 16V
C8J3 47P
C8J4 10 16V
C8J1 47P
C8J5 1000P
TO CYL.HEAD
J8H1
SP(L)
SP(R)
LP(L)
LP(R)
HI-FI A.HEAD(L)
HI-FI A.HEAD(R)
HI-FI
TO CYL.HEAD
J3H1
SP(L)
SP(R)
LP(R)
LP(L)
MONO
A
B
C
D
4
5
6
7

HI-FI HEAD AMP SCHEMATIC DIAGRAM (HA-2)

PH02

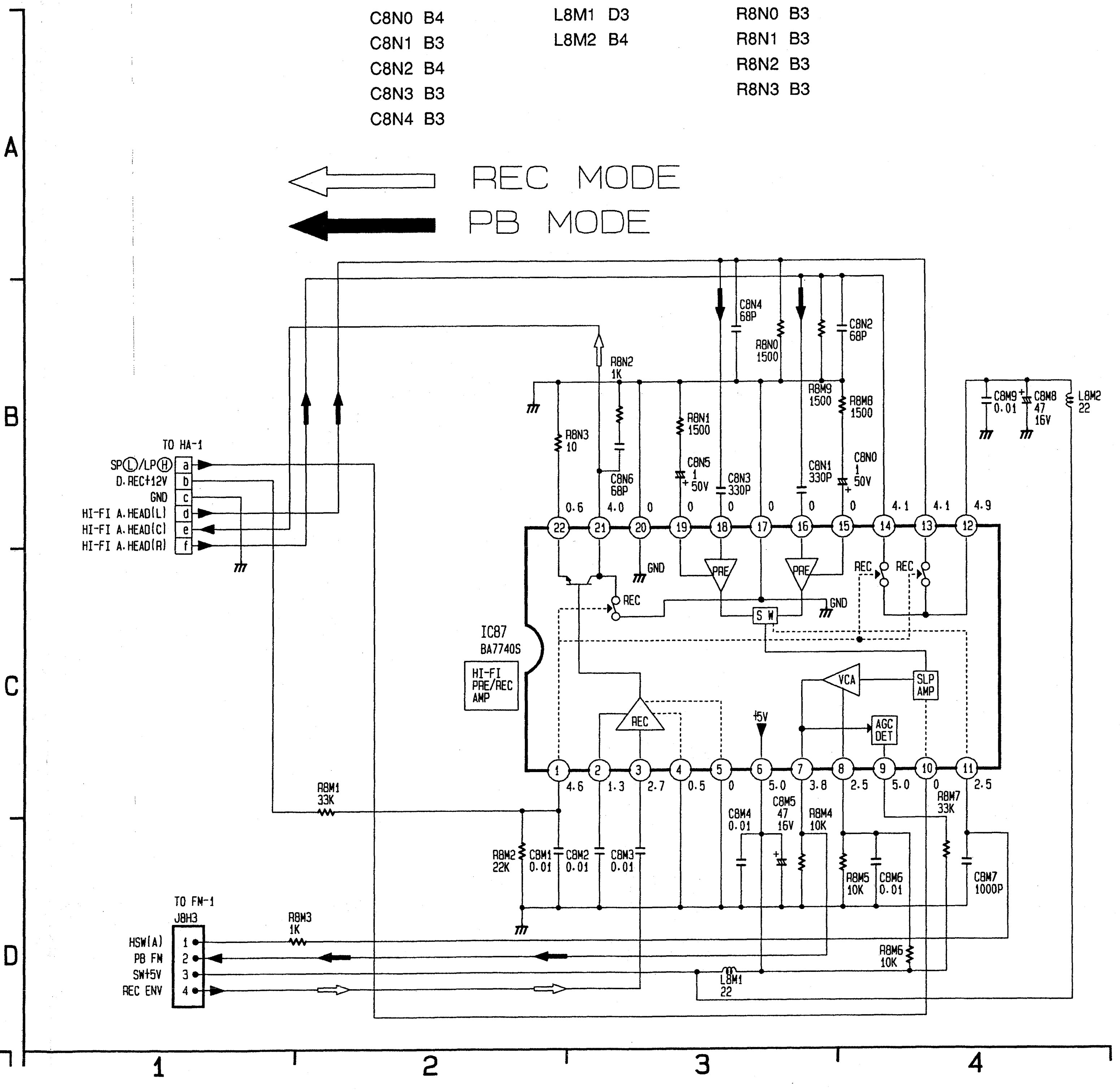
CAPACITORS
- C8M1 D2
- C8M2 D3
- C8M3 D3
- C8M4 D3
- C8M5 D3
- C8M6 D4
- C8M7 D4
- C8M8 B4
- C8M9 B4
- C8N0 B4
- C8N1 B3
- C8N2 B4
- C8N3 B3
- C8N4 B3
- C8N5 B3
- C8N6 B3

IC
- IC87 C2

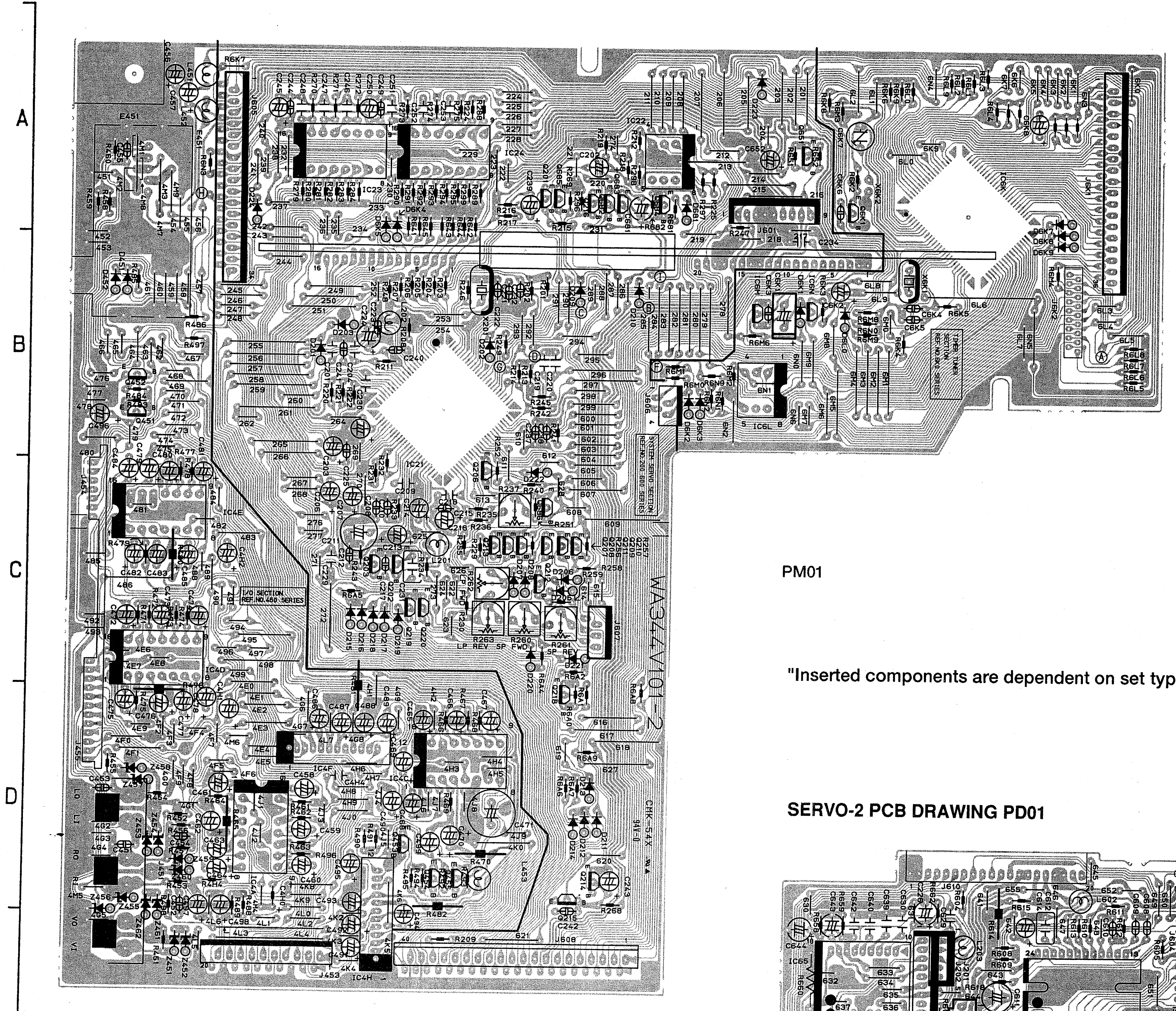
CONNECTOR
- J8H3 D1

COILS
- L8M1 D3
- L8M2 B4

RESISTORS
- R8M1 C2
- R8M2 D2
- R8M3 D2
- R8M4 D3
- R8M5 D4
- R8M6 D4
- R8M7 D4
- R8M8 B4
- R8M9 B3
- R8N0 B3
- R8N1 B3
- R8N2 B3
- R8N3 B3


REC MODE
PB MODE
C8N4 68P
R8N0 1500
C8N2 68P
R8N2 1K
R8M9 1500
R8M8 1500
C8M9 0.01
C8M8 47 16V
L8M2 22
R8N3 10
C8N6 68P
R8N1 1500
C8N5 1 50V
C8N3 330P
C8N1 330P
C8N0 1 50V
TO HA-1
SP(L)/LP(H)
D.REC+12V
GND
HI-FI A.HEAD(L)
HI-FI A.HEAD(C)
HI-FI A.HEAD(R)
IC87
BA7740S
HI-FI PRE/REC AMP
GND
PRE
REC
S W
VCA
SLP AMP
AGC DET
+5V
R8M1 33K
R8M2 22K
C8M1 0.01
C8M2 0.01
C8M3 0.01
C8M4 0.01
C8M5 47 16V
R8M4 10K
R8M5 10K
C8M6 0.01
R8M7 33K
C8M7 1000P
TO FM-1
J8H3
HSW(A)
PB FM
SW+5V
REC ENV
R8M3 1K
R8M6 10K
L8M1 22
A
B
C
D
1
2
3
4

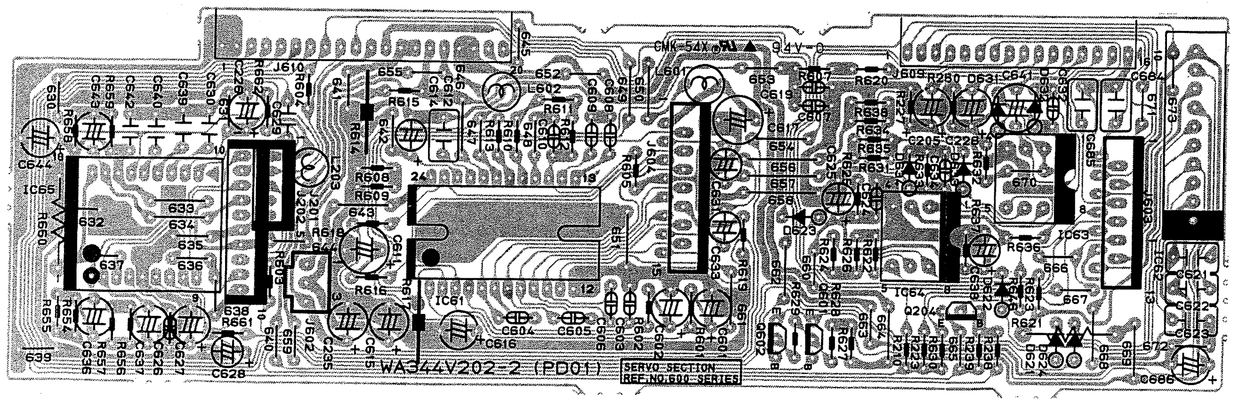
SERVO-1/SERVO-3/TIMER TUNING/AUDIO/VIDEO SELECTOR PCB DRAWING PM01


A
B
C
D
E
WA344V101-2
CMK-54X
I/O SECTION REF.NO.460 SERIES
SYSTEM-SERVO SECTION REF.NO.200,600 SERIES
LP REV SP FWD

PM01

"Inserted components are dependent on set type"

SERVO-2 PCB DRAWING PD01


WA344V202-2 (PD01)
SERVO SECTION REF.NO.600 SERIES
CMK-54X
1
2
3
4
5
6
7

PD01

PD01

CAPACITORS	
C205	D6
C226	E4
C228	D6
C235	E5
C601	E6
C602	E6
C603	E6
C604	E5
C605	E5
C606	E5
C607	D6
C608	E5
C609	E5
C610	E5
C611	E5
C612	D5
C614	D5
C615	E5
C616	E5
C617	E6
C619	D6
C621	E7
C622	E7
C623	E7
C624	E6
C625	E6
C626	E4
C627	E4
C628	E4
C629	D5
C630	E4
C631	E6
C632	D7
C633	E6
C634	E6
C636	E4
C637	E4
C638	E6
C639	E4
C640	E4
C641	D7
C642	E4
C643	E4
C644	E4
C684	D7
C685	D7
C686	E7

DIODES	
D621	E7
D622	E7
D623	E6
D624	E7
D631	D6
D632	D7
D633	E6
D634	E6

ICs	
IC61	E5
IC62	E7
IC63	E7
IC64	E6
IC65	E4

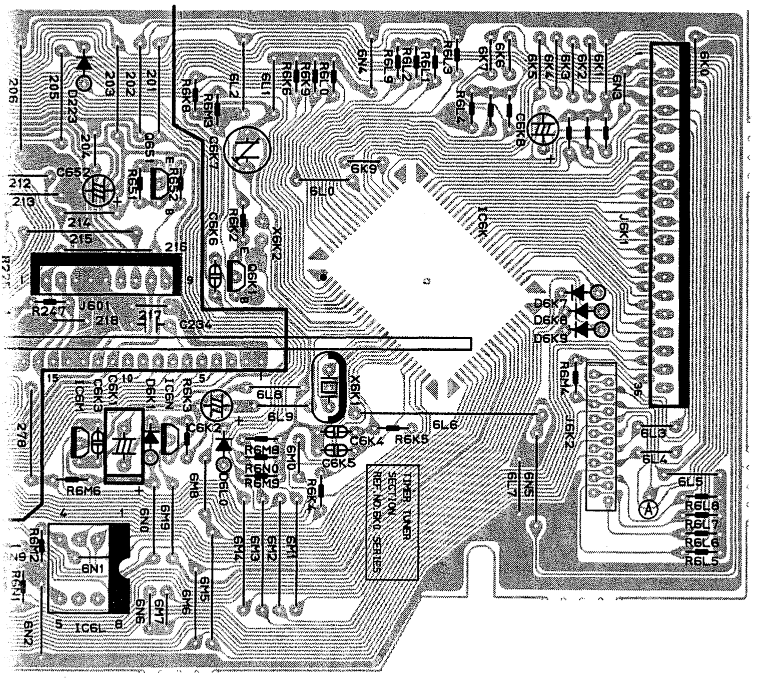
CONNECTORS	
J201	E5
J202	E5
J602	E5
J603	E7
J604	E6
J609	D6
J610	D5

COILS	
L203	E5
L601	D6
L602	D5

TRANSISTORS	
Q204	E6
Q601	E6
Q602	E6

RESISTORS	
R210	E6
R223	E6
R227	D6
R238	E7
R239	E6
R250	D6
R601	E6
R602	E6
R603	E5
R604	D5
R605	E6
R607	D6
R608	E5
R609	E5
R610	E5
R611	D5
R612	E5
R613	E5
R614	D5
R615	D5
R616	E5
R617	E5
R618	E5
R619	E6
R620	D6
R621	E7
R622	E6
R623	E7
R624	E6
R625	E6
R626	E6
R627	E6
R628	E6
R629	E6
R630	E6
R631	E6
R632	E6
R633	E6
R634	D6
R635	E6
R636	E7
R637	E6
R638	D6
R646	E7
R654	E4
R655	E4
R656	E4
R657	E4
R658	E4
R659	E4
R660	E4
R661	E4
R662	D5

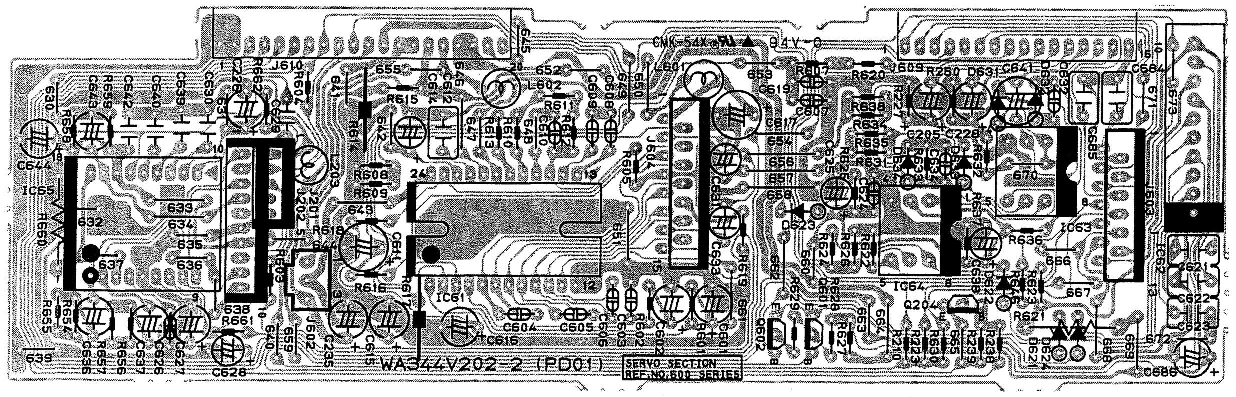
G PM01



PM01

"Inserted components are dependent on set type"

SERVO-2 PCB DRAWING PD01



PD01

4 5 6 7

PD01

CAPACITORS	
C205	D6
C226	E4
C228	D6
C235	E5
C601	E6
C602	E6
C603	E6
C604	E5
C605	E5
C606	E5
C607	D6
C608	E5
C609	E5
C610	E5
C611	E5
C612	D5
C614	D5
C615	E5
C616	E5
C617	E6
C619	D6
C621	E7
C622	E7
C623	E7
C624	E6
C625	E6
C626	E4
C627	E4
C628	E4
C629	D5
C630	E4
C631	E6
C632	D7
C633	E6
C634	E6
C636	E4
C637	E4
C638	E6
C639	E4
C640	E4
C641	D7
C642	E4
C643	E4
C644	E4
C684	D7
C685	D7
C686	E7

DIODES	
D621	E7
D622	E7
D623	E6
D624	E7
D631	D6
D632	D7
D633	E6
D634	E6

ICs	
IC61	E5
IC62	E7
IC63	E7
IC64	E6
IC65	E4

CONNECTORS	
J201	E5
J202	E5
J602	E5
J603	E7
J604	E6
J609	D6
J610	D5

COILS	
L203	E5
L601	D6
L602	D5

TRANSISTORS	
Q204	E6
Q601	E6
Q602	E6

RESISTORS	
R210	E6
R223	E6
R227	D6
R238	E7
R239	E6
R250	D6
R601	E6
R602	E6
R603	E5
R604	D5
R605	E6
R607	D6
R608	E5
R609	E5
R610	E5
R611	D5
R612	E5
R613	E5
R614	D5
R615	D5
R616	E5
R617	E5
R618	E5
R619	E6
R620	D6
R621	E7
R622	E6
R623	E7
R624	E6
R625	E6
R626	E6
R627	E6
R628	E6
R629	E6
R630	E6
R631	E6
R632	E6
R633	E6
R634	D6
R635	E6
R636	E7
R637	E6
R638	D6
R646	E7
R654	E4
R655	E4
R656	E4
R657	E4
R658	E4
R659	E4
R660	E4
R661	E4
R662	D5

PM01

CAPACITORS	
C201	B2
C202	A3
C203	B2
C204	B2
C206	C2
C207	C2
C208	C2
C209	C2
C210	C2
C211	C2
C212	C2
C213	C2
C214	C2
C215	C2
C216	C2
C217	C2
C218	C2
C219	B3
C220	B3
C221	B3
C222	B3
C223	B2
C224	B2
C225	B2
C229	C2
C230	B2
C231	C2
C232	B3
C237	B3
C238	B3
C239	A3
C240	B2
C241	B2
C242	D3
C243	D3
C244	A2
C245	A2
C246	A2
C247	A2
C248	A2
C249	A2
C250	A2
C251	A2
C252	A2
C253	A2
C451	D1
C452	D1
C453	D1
C454	D1
C455	A1
C456	A1
C457	A1
C458	D2
C459	D2
C460	D2
C461	D1
C462	D1
C463	D1
C464	D1
C465	D2
C466	D2
C467	D3
C468	D2
C469	D2
C470	D2
C471	D3
C472	C1
C473	C1
C474	C1
C475	D1
C476	D1
C477	D1
C478	D1
C479	C1
C480	C1
C481	C1
C482	C1
C483	C1
C484	C1
C485	C1
C486	D2
C487	D2
C488	D2
C489	D2
C490	D2
C491	E2
C492	E2
C493	D2
C494	E2
C495	D2
C496	B1
C497	D1
C498	E1
C499	D2
C4H0	D2
C4H1	D1
C4H2	C1
C4H4	D2
C652	A4
C681	A3
C6K1	B4
C6K2	B4
C6K3	B4
C6K4	B4
C6K5	B4
C6K6	A4
C6K7	A4
C6K8	A5
U4F4	D1
U4M4	D2

DIODES	
D201	B2
D202	B3
D203	B2
D205	C3
D206	C3
D207	C3
D208	C3
D209	B3
D210	B3
D211	D3
D212	D3
D213	D3
D214	D3
D215	C2
D216	C2
D217	C2
D218	C2
D219	C2
D220	C3
D221	C3
D222	C3
D223	A4
D224	A1
D451	B1
D452	B1
D681	A3
D6K1	B4
D6K2	B3
D6K3	B3
D6K4	A2
D6K5	A2
D6K7	A5
D6K8	A5
D6K9	B5
D6L0	B4

RF-MODULATOR	
E451	A1

ICs	
IC21	C2
IC22	A3
IC23	A2
IC24	A3
IC4A	D2
IC4C	D2
IC4D	C1
IC4E	C1
IC4F	D2
IC4H	E2
IC6K	A5
IC6L	B4
IC6M	B4
IC6N	B4

CONNECTORS	
J451	D1
J453	E2
J454	C1
J455	D1
J601	A4
J605	A1
J606	B3
J607	C3
J608	E3
J6K1	A5
J6K2	B5

COILS	
L201	C2
L202	B2
L451	A1
L452	A1
L453	D3

TRANSISTORS	
Q201	A3
Q202	C2
Q203	C2
Q206	C3
Q207	C3
Q208	C3
Q209	C3
Q210	C3
Q211	C3
Q212	C3
Q213	C3
Q214	D3
Q215	D3
Q216	A3
Q218	D3
Q219	C2
Q220	C2
Q451	B1
Q452	B1
Q453	D2
Q454	D2
Q455	D2
Q651	A4
Q682	A3
Q683	A3
Q684	A3
Q685	A3
Q686	C3
Q6K1	A4

RESISTORS	
R201	B3
R202	B3
R203	B2
R204	B2
R205	B2
R206	B2
R207	B2
R208	B2
R209	E2
R211	B2
R212	A3
R213	B3
R214	B3
R215	A3
R216	A3
R217	A3
R218	A3
R219	A3
R220	B2
R221	B2
R222	B2
R224	A2
R225	A3
R229	C2
R230	C2
R231	C2
R232	C2
R233	C2
R234	C2
R235	C2
R236	C2
R237	C3
R240	C3
R241	B3
R242	B3
R243	C2
R245	B3
R246	B2
R247	A4
R248	B2
R249	B3
R251	C3
R252	C3
R255	C2
R256	C3
R257	C3
R258	C3
R259	C3
R260	C3
R261	C3
R262	C3
R263	C3
R268	D3
R269	A3
R270	A2
R271	A2
R272	A2
R273	A2
R274	A2
R275	A2
R279	A2
R280	A2
R281	A2
R282	A2
R283	A2
R284	A2
R288	A2
R289	A2
R290	A2
R291	A2
R292	A2
R293	A2
R294	A2
R295	A2
R296	A3
R297	A3
R298	A3
R299	A2
R451	E1
R452	D1
R453	D1
R454	D1
R455	D1
R456	D1
R457	D1
R458	A1
R459	A1
R460	A1
R461	D2
R462	D2
R463	D2
R464	D1
R465	D1
R466	D2
R467	D2
R468	D2
R469	D2
R470	D3
R471	C1
R472	C1
R473	C1
R474	C1
R475	D1
R476	D1
R477	C1
R478	C1
R479	C1
R480	C1
R481	D2
R482	D2
R483	B1
R484	B1
R485	B1
R486	B1
R488	D1
R489	D1
R490	D2
R491	D2
R492	D2
R493	D2
R494	D2
R495	D2
R496	D2
R497	B1
R498	D1
R4H4	D1
R641	A2
R642	A2
R643	A2
R644	A2
R645	A2
R651	A4
R652	A4
R681	A3
R682	A3
R6A0	D3
R6A1	D3
R6A2	C3
R6A4	C3
R6A5	C2
R6A6	D3
R6A7	D3
R6A8	D3
R6A9	D3
R6K2	A4
R6K3	B4
R6K4	B4
R6K5	B5
R6K6	A4
R6K7	A1
R6K8	A4
R6K9	A4
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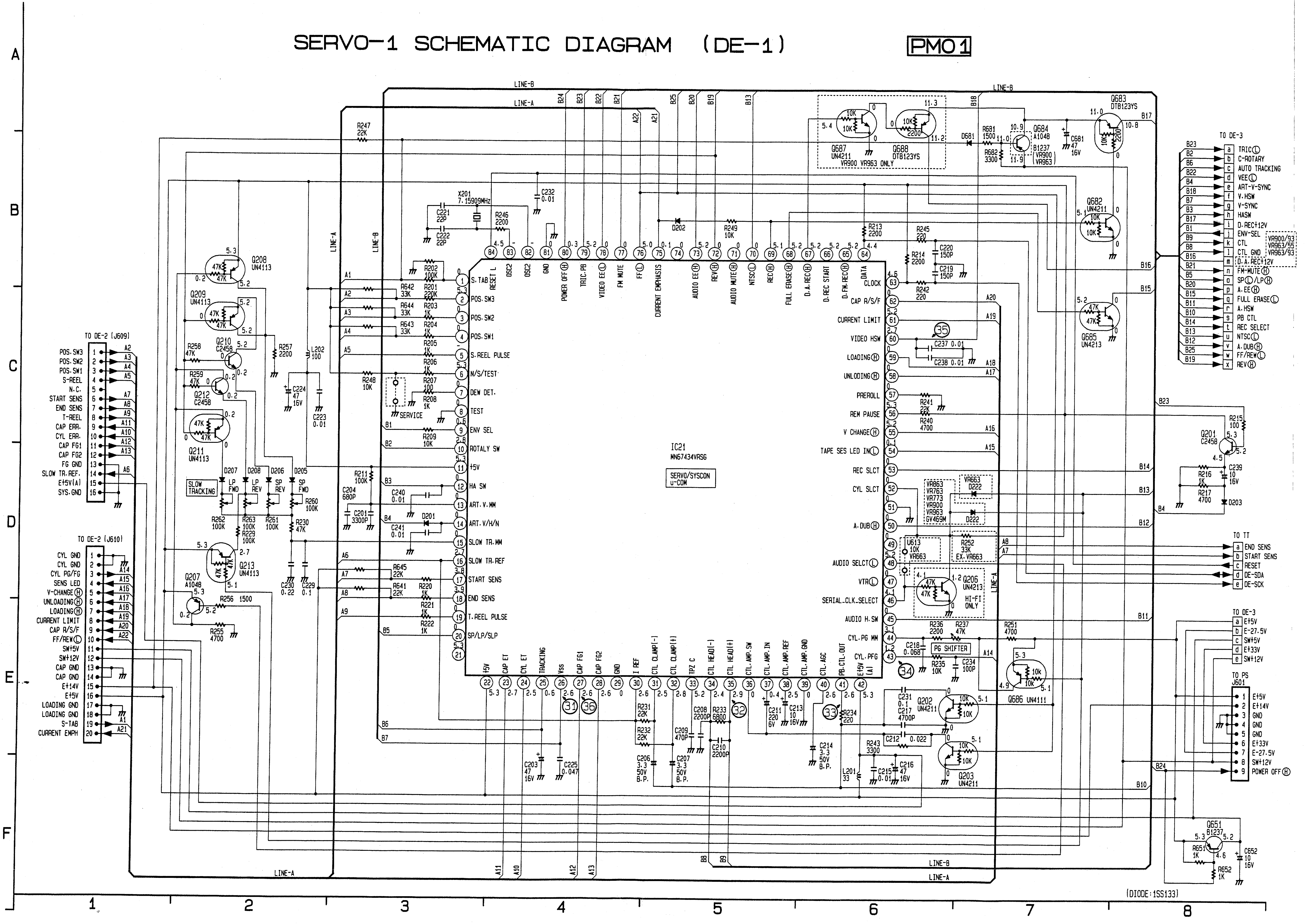
R6L3	A5
R6L4	A5
R6L5	B5
R6L6	B5
R6L7	B5
R6L8	B5
R6L9	A5
R6M0	B3
R6M1	B3
R6M2	B4
R6M3	A4
R6M4	B5
R6M6	B4
R6M8	B4
R6M9	B4
R6N0	B4
R6N1	B4
R6N2	B3
R6N3	A1
R6N9	B3
U496	C1
U4F3	D1

X'TALS	
X201	B2
X6K1	B4
X6K2	A4

ZENERS	
Z451	E1
Z452	E1
Z453	D1
Z454	D1
Z455	D1
Z456	D1
Z457	D1
Z458	D1
Z459	D1
Z460	D1
Z461	D1
Z462	D1

SERVO-1 SCHEMATIC DIAGRAM (DE-1)

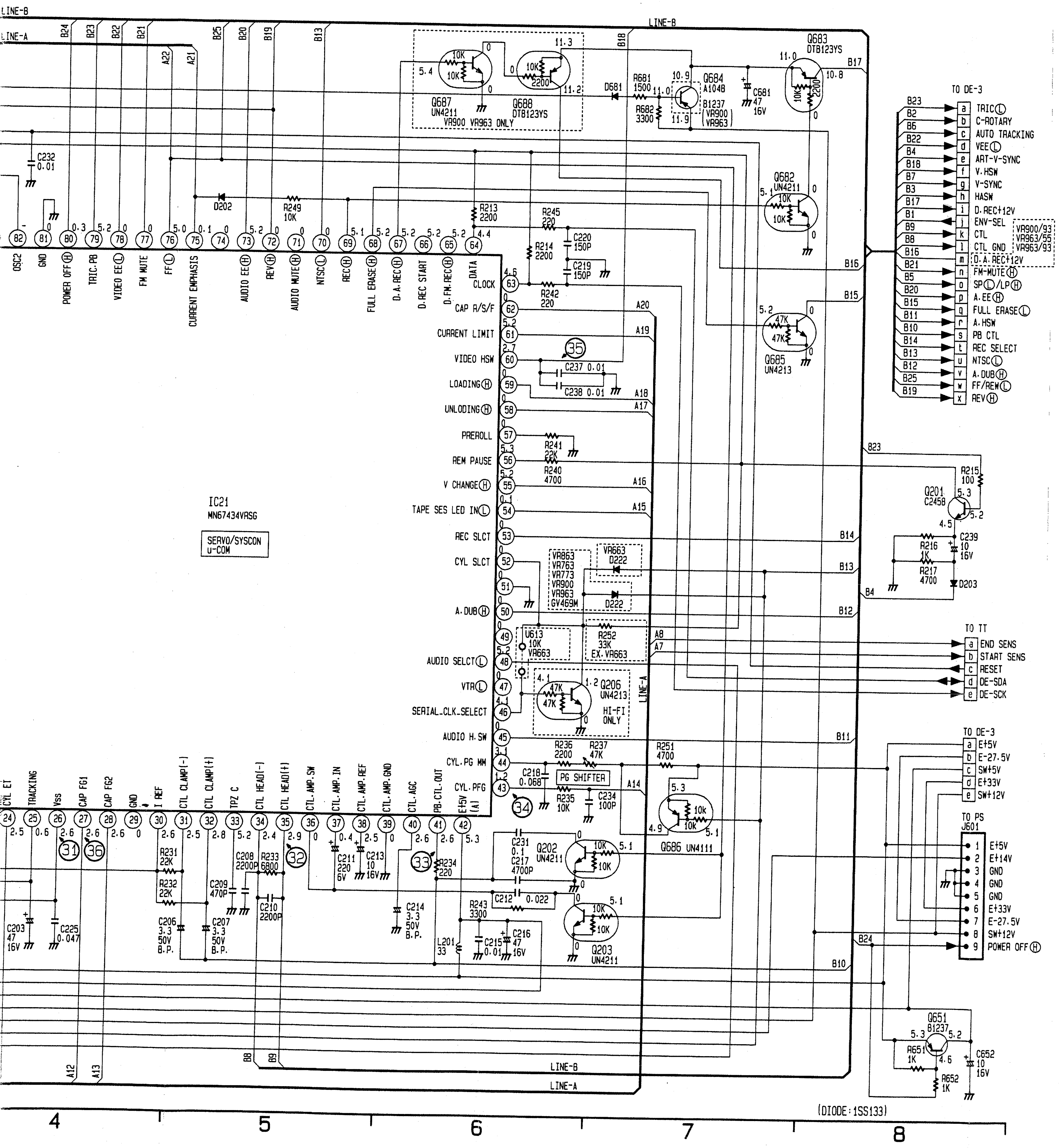
PMO1

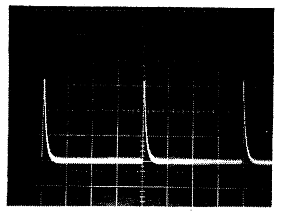


A
B
C
D
E
F
1
2
3
4
5
6
7
8
IC21
MN67434VRSG
SERVO/SYSCON u-COM
LINE-A
LINE-B
TO DE-2 (J609)
POS.SW3
POS.SW2
POS.SW1
S-REEL
N.C.
START SENS
END SENS
T-REEL
CAP ERR.
CYL ERR.
CAP FG1
CAP FG2
FG GND
SLOW TR.REF.
E+5V(A)
SYS.GND
TO DE-2 (J610)
CYL GND
CYL GND
CYL PG/FG
SENS LED
V-CHANGE(H)
UNLOADING(H)
LOADING(H)
CURRENT LIMIT
CAP R/S/F
FF/REW(L)
SW+5V
SW+12V
CAP GND
CAP GND
E+14V
E+5V
LOADING GND
LOADING GND
S-TAB
CURRENT EMPH
S.TAB
POS.SW3
POS.SW2
POS.SW1
S.REEL PULSE
N/S/TEST
DEW DET.
TEST
ENV SEL
ROTALY SW
+5V
HA SW
ART.V.MM
ART.V/H/N
SLOW TR.MM
SLOW TR.REF
START SENS
END SENS
T.REEL PULSE
SP/LP/SLP
RESET L
OSC2
OSC2
GND
POWER OFF(H)
TRIC.PB
VIDEO EE(L)
FM MUTE
FF(L)
CURRENT EMPHASIS
AUDIO EE(H)
REV(H)
AUDIO MUTE(H)
NTSC(L)
REC(H)
FULL ERASE(H)
D.A.REC(H)
D.REC START
D.FM.REC(H)
DATA
CLOCK
CAP R/S/F
CURRENT LIMIT
VIDEO HSW
LOADING(H)
UNLODING(H)
PREROLL
REM PAUSE
V CHANGE(H)
TAPE SES LED IN(L)
REC SLCT
CYL SLCT
A.DUB(H)
AUDIO SELCT(L)
VTR(L)
SERIAL.CLK.SELECT
AUDIO H.SW
CYL.PG MM
CYL.PFG
+5V
CAP ET
CYL ET
TRACKING
Vss
CAP FG1
CAP FG2
GND
I REF
CTL CLAMP(-)
CTL CLAMP(+)
TPZ C
CTL HEAD(-)
CTL HEAD(+)
CTL.AMP.SW
CTL.AMP.IN
CTL.AMP.REF
CTL.AMP.GND
CTL.AGC
PB.CTL.OUT
E+5V (A)
X201 7.15909MHz
SERVICE
SLOW TRACKING
LP FWD
LP REV
SP REV
SP FWD
PG SHIFTER
HI-FI ONLY
VR900 VR963 ONLY
Q208 UN4113
Q209 UN4113
Q210 C2458
Q212 C2458
Q211 UN4113
Q213 UN4113
Q207 A1048
Q687 UN4211
Q688 DTB123YS
Q684 A1048
Q683 DTB123YS
Q682 UN4211
Q685 UN4213
Q201 C2458
Q206 UN4213
Q686 UN4111
Q202 UN4211
Q203 UN4211
Q651 B1237
TO DE-3
TRIC(L)
C-ROTARY
AUTO TRACKING
VEE(L)
ART-V-SYNC
V.HSW
V-SYNC
HASW
D.REC+12V
ENV-SEL
CTL
CTL GND
D.A.REC+12V
FM-MUTE(H)
SP(L)/LP(H)
A.EE(H)
FULL ERASE(L)
A.HSW
PB CTL
REC SELECT
NTSC(L)
A.DUB(H)
FF/REW(L)
REV(H)
VR900/93
VR963/55
VR963/93
TO TT
END SENS
START SENS
RESET
DE-SDA
DE-SCK
TO DE-3
E+5V
E-27.5V
SW+5V
E+33V
SW+12V
TO PS J601
E+5V
E+14V
GND
GND
GND
E+33V
E-27.5V
SW+12V
POWER OFF(H)
(DIODE:1SS133)

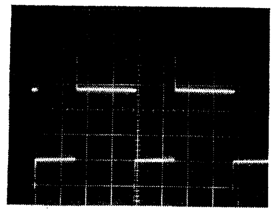
TIC DIAGRAM (DE-1)

PMO1

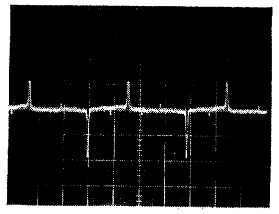

LINE-B
LINE-A
B24
B23
B22
B21
A22
A21
B25
B20
B19
B13
B18
C232
0.01
D202
R249
10K
R213
2200
R245
220
R214
2200
C220
150P
C219
150P
R242
220
Q687
UN4211
Q688
DTB123YS
VR900 VR963 ONLY
D681
R681
1500
R682
3300
Q684
A1048
B1237
(VR900
VR963)
C681
47
16V
Q683
DTB123YS
B17
Q682
UN4211
Q685
UN4213
B16
B15
OSC2
GND
POWER OFF Ⓗ
TRIC.PB
VIDEO EE Ⓛ
FM MUTE
FF Ⓛ
CURRENT EMPHASIS
AUDIO EE Ⓗ
REV Ⓗ
AUDIO MUTE Ⓗ
NTSC Ⓛ
REC Ⓗ
FULL ERASE Ⓗ
D.A.REC Ⓗ
D.REC START
D.FM.REC Ⓗ
DATA
CLOCK
CAP R/S/F
CURRENT LIMIT
VIDEO HSW
LOADING Ⓗ
UNLODING Ⓗ
PREROLL
REM PAUSE
V CHANGE Ⓗ
TAPE SES LED IN Ⓛ
REC SLCT
CYL SLCT
A.DUB Ⓗ
AUDIO SELCT Ⓛ
VTR Ⓛ
SERIAL_CLK_SELECT
AUDIO H.SW
CYL.PG MM
CYL.PFG
IC21
MN67434VRSG
SERVO/SYSCON
u-COM
C237 0.01
C238 0.01
A20
A19
A18
A17
A16
A15
A14
A8
A7
R241
22K
R240
4700
VR863
VR763
VR773
VR900
VR963
GV469M
VR663
D222
U613
10K
VR663
R252
33K
EX.VR663
Q206
UN4213
HI-FI
ONLY
LINE-A
R236
2200
R237
47K
R251
4700
C218
0.068
PG SHIFTER
R235
10K
C234
100P
Q686 UN4111
B14
B13
B12
B11
B10
B4
B23
B24
TO DE-3
TRIC Ⓛ
C-ROTARY
AUTO TRACKING
VEE Ⓛ
ART-V-SYNC
V.HSW
V-SYNC
HASW
D.REC+12V
ENV-SEL
CTL
CTL GND
D.A.REC+12V
VR900/93
VR963/55
VR963/93
FM-MUTE Ⓗ
SP Ⓛ/LP Ⓗ
A.EE Ⓗ
FULL ERASE Ⓛ
A.HSW
PB CTL
REC SELECT
NTSC Ⓛ
A.DUB Ⓗ
FF/REW Ⓛ
REV Ⓗ
R215
100
Q201
C2458
R216
1K
R217
4700
C239
10
16V
D203
TO TT
END SENS
START SENS
RESET
DE-SDA
DE-SCK
TO DE-3
E+5V
E-27.5V
SW+5V
E+33V
SW+12V
TO PS
J601
E+5V
E+14V
GND
GND
GND
E+33V
E-27.5V
SW+12V
POWER OFF Ⓗ
Q651
B1237
R651
1K
R652
1K
C652
10
16V
CYL ET
TRACKING
Vss
CAP FG1
CAP FG2
GND
I REF
CTL CLAMP(-)
CTL CLAMP(+)
TPZ C
CTL HEAD(-)
CTL HEAD(+)
CTL.AMP.SW
CTL.AMP.IN
CTL.AMP.REF
CTL.AMP.GND
CTL.AGC
PB.CTL.OUT
E+5V (A)
C203
47
16V
C225
0.047
R231
22K
R232
22K
C206
3.3
50V
B.P.
C207
3.3
50V
B.P.
C209
470P
C208
2200P
R233
6800
C210
2200P
C211
220
6V
C213
10
16V
C214
3.3
50V
B.P.
R234
220
C231
0.1
C217
4700P
Q202
UN4211
C212 0.022
R243
3300
L201
33
C215
0.01
C216
47
16V
Q203
UN4211
A12
A13
B8
B9
㉛
㉜
㉝
㉞
㉟
㊱
(DIODE : 1SS133)
4
5
6
7
8



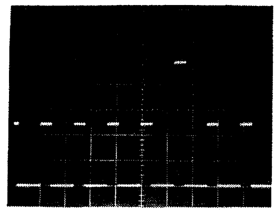
㉛ IC21 Pin26PAL SP REC/PB
0.2V/Div 5msec/Div



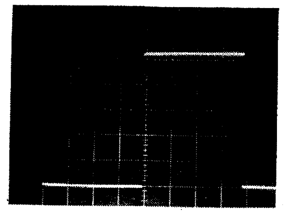
㉜ IC21 Pin35 PAL SP REC
1V/Div 10μsec/Div



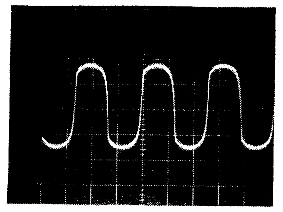
㉝ IC21 Pin41 PAL SP PB
1V/Div 10μsec/Div



㉞ IC21 Pin43 PAL SP PB
1V/Div 5msec/Div



㉟ IC21 Pin60PAL SP REC/PB
1V/Div 5msec/Div



㊱ IC21 Pin27 PAL SP PB
0.2V/Div 0.5msec/Div

CAPACITORS	
C201	D3
C203	F4
C204	D3
C206	F5
C207	F5
C208	E5
C209	E5
C210	E5
C211	E5
C212	E6
C213	E5
C214	E6
C215	F6
C216	F6
C217	E6
C218	E6
C219	B6
C220	B6
C221	B3
C222	B3
C223	C2
C224	C2
C225	F4
C229	D2
C230	D2
C231	E6
C232	B4
C234	E7
C237	C6
C238	C6
C239	D8
C240	D3
C241	D3
C652	F8
C681	A7

DIODES	
D201	D3
D202	B5
D203	D8
D205	D2
D206	D2
D207	D2
D208	D2
D222	D7
D681	B7

IC	
IC21	D5

CONNECTORS	
J601	E8
J609	C1
J610	E1

COILS	
L201	F6
L202	C2

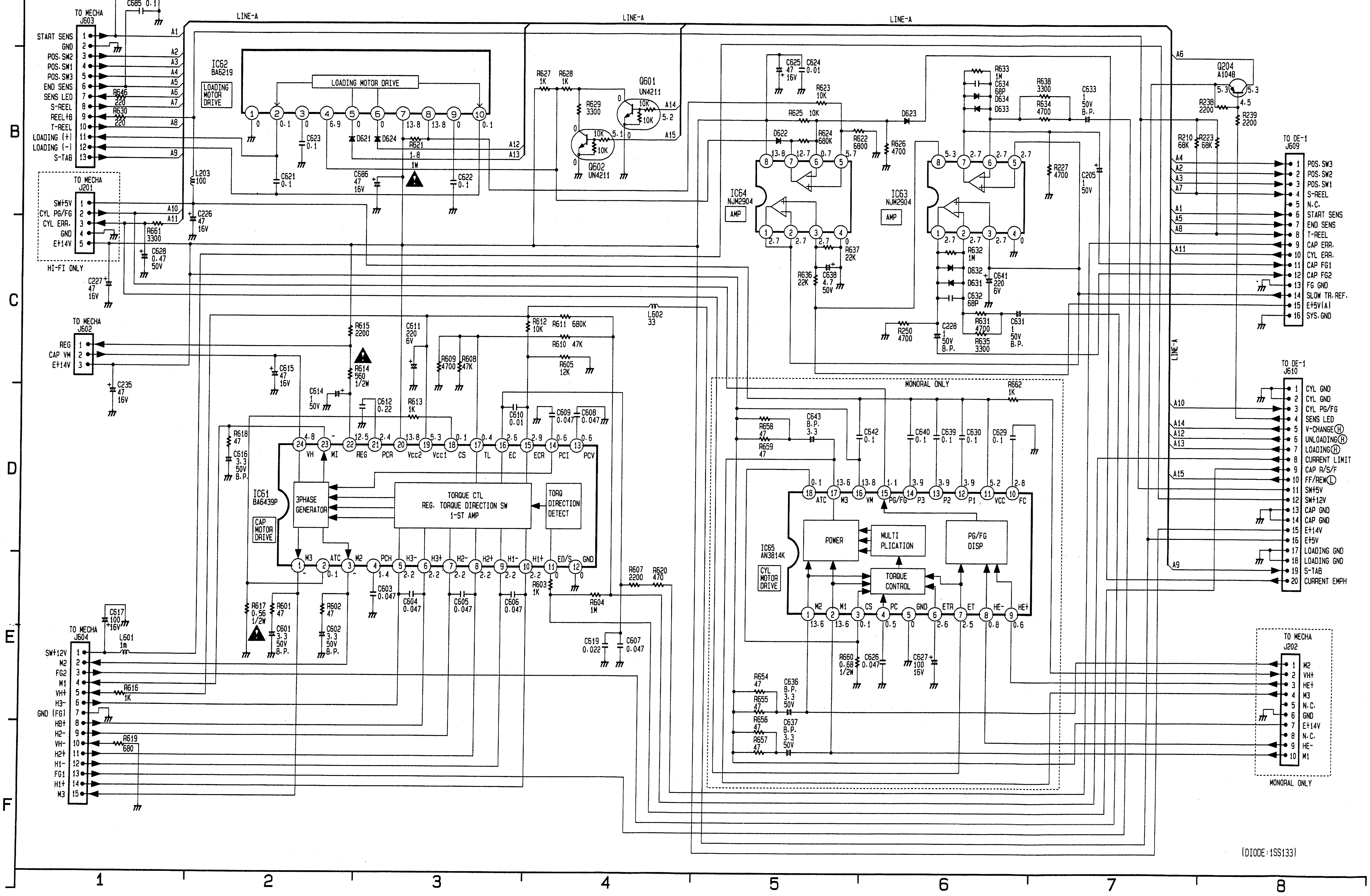
TRANSISTORS	
Q201	C8
Q202	E7
Q203	E7
Q206	D6
Q207	E2
Q208	B2
Q209	C2
Q210	C2
Q211	C2
Q212	C2
Q213	D2
Q651	F8
Q682	B7
Q683	A7
Q684	B7
Q685	C7
Q686	E7
Q687	A6
Q688	A6

RESISTORS	
R201	B3
R202	B3
R203	C3
R204	C3
R205	C3
R206	C3
R207	C3
R208	C3
R209	C3
R211	D3
R213	B6
R214	B6
R215	C8
R216	D8
R217	D8
R220	D3
R221	D3
R222	E3
R229	D2
R230	D2
R231	E5
R232	E5
R233	E5
R234	E6
R235	E6
R236	E6
R237	E6
R240	C6
R241	C6
R242	B6
R243	E6
R245	B6
R246	B4
R247	B3
R248	C3
R249	B5
R251	E7
R252	D7
R255	E2
R256	E2
R257	C2
R258	C2
R259	C2
R260	D2
R261	D2
R262	D2
R263	D2
R641	D3
R642	C3
R643	C3
R644	C3
R645	D3
R651	F8
R652	F8
R681	B7
R682	B7

X'TAL	
X201	B3

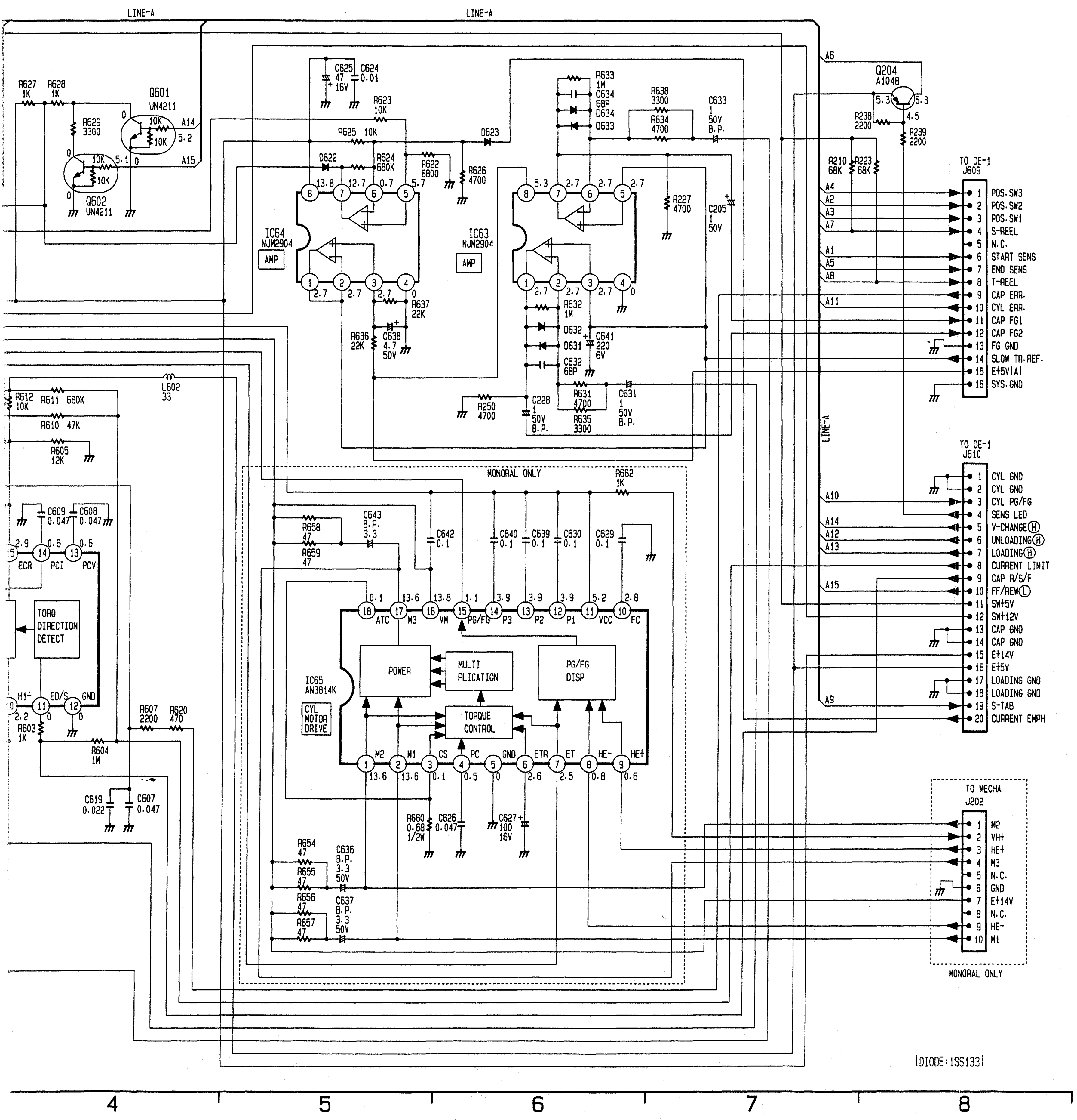
SERVO-2 SCHEMATIC DIAGRAM (DE-2)

PD01


A
B
C
D
E
F
1
2
3
4
5
6
7
8
TO MECHA J603
START SENS 1
GND 2
POS.SW2 3
POS.SW1 4
POS.SW3 5
END SENS 6
SENS LED 7
S-REEL 8
REEL+6 9
T-REEL 10
LOADING (+) 11
LOADING (-) 12
S-TAB 13
C684 0.1
C685 0.1
R646 220
R630 220
LINE-A
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
TO MECHA J201
SW+5V 1
CYL PG/FG 2
CYL ERR. 3
GND 4
E+14V 5
HI-FI ONLY
R661 3300
C226 47 16V
C628 0.47 50V
C227 47 16V
L203 100
IC62 BA6219
LOADING MOTOR DRIVE
C623 0.1
C621 0.1
D621
D624
R621 1.8 1W
C686 47 16V
C622 0.1
R627 1K
R628 1K
R629 3300
Q601 UN4211
Q602 UN4211
10K
IC64 NJM2904
AMP
C625 47 16V
C624 0.01
R623 10K
R625 10K
D622
R624 680K
R622 6800
R626 4700
D623
R637 22K
R636 22K
C638 4.7 50V
IC63 NJM2904
R633 1M
C634 68P
D634
D633
R638 3300
R634 4700
C633 1 50V B.P.
R227 4700
C205 1 50V
R632 1M
D632
D631
C641 220 6V
C632 68P
R631 4700
R635 3300
C631 1 50V B.P.
R250 4700
C228 1 50V B.P.
Q204 A1048
R238 2200
R239 2200
R210 68K
R223 68K
TO DE-1 J609
1 POS.SW3
2 POS.SW2
3 POS.SW1
4 S-REEL
5 N.C.
6 START SENS
7 END SENS
8 T-REEL
9 CAP ERR.
10 CYL ERR.
11 CAP FG1
12 CAP FG2
13 FG GND
14 SLOW TR.REF.
15 E+5V(A)
16 SYS.GND
TO MECHA J602
REG 1
CAP VM 2
E+14V 3
C235 47 16V
C615 47 16V
R615 2200
R614 560 1/2W
C611 220 6V
R612 10K
R611 680K
R610 47K
R605 12K
L602 33
R609 4700
R608 47K
C614 1 50V
C612 0.22
R613 1K
C610 0.01
C609 0.047
C608 0.047
R618 47
C616 3.3 50V B.P.
IC61 BA6439P
CAP MOTOR DRIVE
3PHASE GENERATOR
TORQUE CTL REG. TORQUE DIRECTION SW 1-ST AMP
TORQ DIRECTION DETECT
VH
MI
REG
PCR
Vcc2
Vcc1
CS
TL
EC
ECR
PCI
PCV
M3
ATC
M2
PCH
H3-
H3+
H2-
H2+
H1-
H1+
ED/S
GND
C603 0.047
C604 0.047
C605 0.047
C606 0.047
R603 1K
R604 1M
R607 2200
R620 470
C619 0.022
C607 0.047
R617 0.56 1/2W
R601 47
C601 3.3 50V B.P.
R602 47
C602 3.3 50V B.P.
TO MECHA J604
SW+12V 1
M2 2
FG2 3
M1 4
VH+ 5
H3- 6
GND (FG) 7
H3+ 8
H2- 9
VH- 10
H2+ 11
H1- 12
FG1 13
H1+ 14
M3 15
C617 100 16V
L601 1m
R616 1K
R619 680
MONORAL ONLY
R662 1K
R658 47
R659 47
C643 B.P. 3.3
C642 0.1
C640 0.1
C639 0.1
C630 0.1
C629 0.1
IC65 AN3814K
CYL MOTOR DRIVE
ATC
M3
VM
PG/FG
P3
P2
P1
VCC
FC
POWER
MULTI PLICATION
PG/FG DISP
TORQUE CONTROL
M2
M1
CS
PC
GND
ETR
ET
HE-
HE+
R660 0.68 1/2W
C626 0.047
C627 100 16V
R654 47
R655 47
R656 47
R657 47
C636 B.P. 3.3 50V
C637 B.P. 3.3 50V
TO DE-1 J610
1 CYL GND
2 CYL GND
3 CYL PG/FG
4 SENS LED
5 V-CHANGE(H)
6 UNLOADING(H)
7 LOADING(H)
8 CURRENT LIMIT
9 CAP R/S/F
10 FF/REW(L)
11 SW+5V
12 SW+12V
13 CAP GND
14 CAP GND
15 E+14V
16 E+5V
17 LOADING GND
18 LOADING GND
19 S-TAB
20 CURRENT EMPH
TO MECHA J202
1 M2
2 VH+
3 HE+
4 M3
5 N.C.
6 GND
7 E+14V
8 N.C.
9 HE-
10 M1
MONORAL ONLY
(DIODE:1SS133)

EMATIC DIAGRAM (DE-2)

PDO1



LINE-A
LINE-A
R627 1K
R628 1K
R629 3300
Q601 UN4211
Q602 UN4211
10K
A14
A15
5.2
5.1
C625 47 16V
C624 0.01
R623 10K
R625 10K
D622
R624 680K
R622 6800
R626 4700
D623
IC64 NJM2904
AMP
IC63 NJM2904
R637 22K
R636 22K
C638 4.7 50V
R633 1M
C634 68P
D634
D633
R638 3300
R634 4700
C633 1 50V B.P.
R227 4700
C205 1 50V
R632 1M
D632
D631
C641 220 6V
C632 68P
R250 4700
C228 1 50V B.P.
R631 4700
R635 3300
C631 1 50V B.P.
A6
Q204 A1048
R238 2200
R239 2200
R210 68K
R223 68K
A4
A2
A3
A7
A1
A5
A8
A11
A10
A14
A12
A13
A15
A9
LINE-A
TO DE-1 J609
1 POS.SW3
2 POS.SW2
3 POS.SW1
4 S-REEL
5 N.C.
6 START SENS
7 END SENS
8 T-REEL
9 CAP ERR.
10 CYL ERR.
11 CAP FG1
12 CAP FG2
13 FG GND
14 SLOW TR.REF.
15 E+5V(A)
16 SYS.GND
TO DE-1 J610
1 CYL GND
2 CYL GND
3 CYL PG/FG
4 SENS LED
5 V-CHANGE(H)
6 UNLOADING(H)
7 LOADING(H)
8 CURRENT LIMIT
9 CAP R/S/F
10 FF/REW(L)
11 SW+5V
12 SW+12V
13 CAP GND
14 CAP GND
15 E+14V
16 E+5V
17 LOADING GND
18 LOADING GND
19 S-TAB
20 CURRENT EMPH
L602 33
R612 10K
R611 680K
R610 47K
R605 12K
C609 0.047
C608 0.047
ECR
PCI
PCV
TORQ DIRECTION DETECT
H1+
ED/S
GND
R603 1K
R604 1M
R607 2200
R620 470
C619 0.022
C607 0.047
MONORAL ONLY
R662 1K
C643 B.P. 3.3
R658 47
R659 47
C642 0.1
C640 0.1
C639 0.1
C630 0.1
C629 0.1
ATC
M3
VM
PG/FG
P3
P2
P1
VCC
FC
IC65 AN3814K
CYL MOTOR DRIVE
POWER
MULTI PLICATION
PG/FG DISP
TORQUE CONTROL
M2
M1
CS
PC
GND
ETR
ET
HE-
HE+
R660 0.68 1/2W
C626 0.047
C627 100 16V
R654 47
R655 47
R656 47
R657 47
C636 B.P. 3.3 50V
C637 B.P. 3.3 50V
TO MECHA J202
1 M2
2 VH+
3 HE+
4 M3
5 N.C.
6 GND
7 E+14V
8 N.C.
9 HE-
10 M1
MONORAL ONLY
(DIODE:1SS133)
4
5
6
7
8

CAPACITORS	
C205	B7
C226	C1
C227	C1
C228	C6
C235	D1
C601	E2
C602	E2
C603	E3
C604	E3
C605	E3
C606	E3
C607	E4
C608	D4
C609	D4
C610	D3
C611	C3
C612	D3
C614	D2
C615	C2
C616	D2
C617	E1
C619	E4
C621	B2
C622	B3
C623	B2
C624	B5
C625	B5
C626	E6
C627	E6
C628	C1
C629	D6
C630	D6
C631	C6
C632	C6
C633	B7
C634	B6
C636	E5
C637	F5
C638	C5
C639	D6
C640	D6
C641	C6
C642	D5
C643	D5
C684	A1
C685	A1
C686	B3

DIODES	
D621	B2
D622	B5
D623	B6
D624	B3
D631	C6
D632	C6
D633	B6
D634	B6

ICs	
IC61	D3
IC62	B2
IC63	B6
IC64	B5
IC65	D6

CONNECTORS	
J201	C1
J202	E8
J602	C1
J603	B1
J604	E1
J609	C8
J610	D8

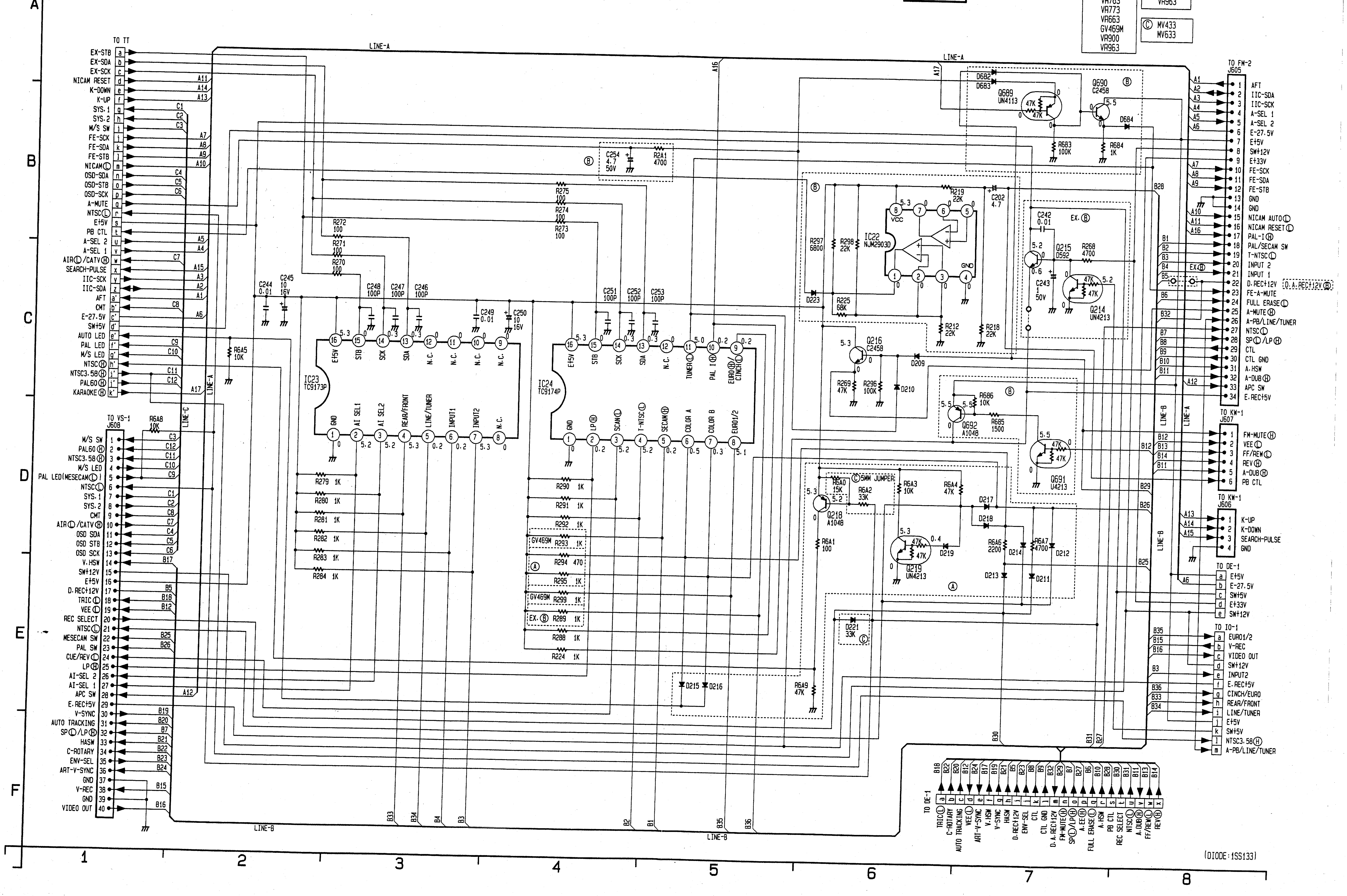
COILS	
L203	B1
L601	E1
L602	C4

TRANSISTORS	
Q204	B8
Q601	B4
Q602	B4

RESITORS	
R210	B7
R223	B8
R227	B7
R238	B8
R239	B8
R250	C6
R601	E2
R602	E2
R603	E4
R604	E4
R605	C4
R607	E4
R608	C3
R609	C3
R610	C4
R611	C4
R612	C3
R613	D3
R614	C2
R615	C2
R616	E1
R617	E2
R618	D2
R619	F1
R620	E4
R621	B3
R622	B5
R623	B5
R624	B5
R625	B5
R626	B6
R627	B4
R628	B4
R629	B4
R631	C6
R632	C6
R633	B6
R634	B7
R635	C6
R636	C5
R637	C5
R638	B7
R654	E5
R655	E5
R656	F5
R657	F5
R658	D5
R659	D5
R660	E5
R661	C1
R662	D6

SERVO-3 SCHEMATIC DIAGRAM (DE-3)

PMO1


Ⓐ VR863 VR763 VR773 VR663 GV469M VR900 VR963
Ⓑ VR900 VR963
Ⓒ MV433 MV633
A
B
C
D
E
F
1
2
3
4
5
6
7
8
TO TT
EX-STB a
EX-SDA b
EX-SCK c
NICAM RESET d
K-DOWN e
K-UP f
SYS. 1 g
SYS. 2 h
M/S SW i
FE-SCK j
FE-SDA k
FE-STB l
NICAMⓁ m
OSD-SDA n
OSD-STB o
OSD-SCK p
A-MUTE q
NTSCⓁ r
E+5V s
PB CTL t
A-SEL 2 u
A-SEL 1 v
AIRⓁ/CATVⒽ w
SEARCH-PULSE x
IIC-SCK y
IIC-SDA z
AFT a'
CMT b'
E-27.5V c'
SW+5V d'
AUTO LED e'
PAL LED f'
M/S LED g'
NTSCⒽ h'
NTSC3.58Ⓗ i'
PAL60Ⓗ j'
KARAOKEⒽ k'
TO VS-1 J608
M/S SW 1
PAL60Ⓗ 2
NTSC3.58Ⓗ 3
M/S LED 4
PAL LED(MESECAMⓁ) 5
NTSCⓁ 6
SYS. 1 7
SYS. 2 8
CMT 9
AIRⓁ/CATVⒽ 10
OSD SDA 11
OSD STB 12
OSD SCK 13
V.HSW 14
SW+12V 15
E+5V 16
D.REC+12V 17
TRICⓁ 18
VEEⓁ 19
REC SELECT 20
NTSCⓁ 21
MESECAM SW 22
PAL SW 23
CUE/REVⓁ 24
LPⒽ 25
AI-SEL 2 26
AI-SEL 1 27
APC SW 28
E.REC+5V 29
V-SYNC 30
AUTO TRACKING 31
SPⓁ/LPⒽ 32
HASW 33
C-ROTARY 34
ENV-SEL 35
ART-V-SYNC 36
GND 37
V-REC 38
GND 39
VIDEO OUT 40
R6A8 10K
R6A5 10K
LINE-A
LINE-B
LINE-C
IC23 TC9173P
IC24 TC9174P
E+5V STB SCK SDA N.C. N.C. N.C. N.C.
GND AI SEL1 AI SEL2 REAR/FRONT LINE/TUNER INPUT1 INPUT2 N.C.
E+5V STB SCK SDA N.C. TUNERⓁ PAL IⒽ EURO(H)/CINCH(L)
GND LPⒽ SCANⓁ T-NTSCⓁ SECAMⒽ COLOR A COLOR B EURO1/2
C244 0.01
C245 10 16V
C248 100P
C247 100P
C246 100P
C249 0.01
C250 10 16V
C251 100P
C252 100P
C253 100P
C254 4.7 50V
R2A1 4700
R275 100
R274 100
R273 100
R272 100
R271 100
R270 100
R279 1K
R280 1K
R281 1K
R282 1K
R283 1K
R284 1K
R290 1K
R291 1K
R292 1K
GV469M R293 1K
Ⓐ R294 470
R295 1K
GV469M R299 1K
EX.Ⓑ R289 1K
R288 1K
R224 1K
IC22 NJM29030
VCC
GND
R297 6800
R298 22K
R219 22K
C202 4.7
D223
R225 68K
R212 22K
R218 22K
Q216 C2458
R269 47K
R296 100K
D210
D209
C242 0.01
EX.Ⓑ
Q215 D592
R268 4700
C243 1 50V
Q214 UN4213
D682
D683
Q689 UN4113
Q690 C2458
D684
R683 100K
R684 1K
R686 10K
R685 1500
Q692 A1048
Q691 U4213
R6A0 15K
Ⓒ 5MM JUMPER
R6A2 33K
R6A3 10K
R6A4 47K
Q218 A1048
R6A1 100
D217
D218
Q219 UN4213
D219
R6A6 2200
D214
R6A7 4700
D212
D213
D211
D221 33K
D215
D216
R6A9 47K
TO FM-2 J605
AFT 1
IIC-SDA 2
IIC-SCK 3
A-SEL 1 4
A-SEL 2 5
E-27.5V 6
E+5V 7
SW+12V 8
E+33V 9
FE-SCK 10
FE-SDA 11
FE-STB 12
GND 13
GND 14
NICAM AUTOⓁ 15
NICAM RESETⓁ 16
PAL-IⒽ 17
PAL/SECAM SW 18
T-NTSCⓁ 19
INPUT 2 20
INPUT 1 21
D.REC+12V 22
FE-A-MUTE 23
FULL ERASEⓁ 24
A-MUTEⒽ 25
A-PB/LINE/TUNER 26
NTSCⓁ 27
SPⓁ/LPⒽ 28
CTL 29
CTL GND 30
A.HSW 31
A-DUBⒽ 32
APC SW 33
E.REC+5V 34
D.A.REC+12V Ⓑ
TO KW-1 J607
FM-MUTEⒽ 1
VEEⓁ 2
FF/REWⓁ 3
REVⒽ 4
A-DUBⒽ 5
PB CTL 6
TO KW-1 J606
K-UP 1
K-DOWN 2
SEARCH-PULSE 3
GND 4
TO DE-1
E+5V a
E-27.5V b
SW+5V c
E+33V d
SW+12V e
TO IO-1
EURO1/2 a
V-REC b
VIDEO OUT c
SW+12V d
INPUT2 e
E.REC+5V f
CINCH/EURO g
REAR/FRONT h
LINE/TUNER i
E+5V j
SW+5V k
NTSC3.58Ⓗ l
A-PB/LINE/TUNER m
TO DE-1
TRICⓁ a
C-ROTARY b
AUTO TRACKING c
VEEⓁ d
ART-V-SYNC e
V.HSW f
V-SYNC g
HASW h
D.REC+12V i
ENV-SEL j
CTL k
CTL GND l
D.A.REC+12V m
FM-MUTEⒽ n
SPⓁ/LPⒽ o
A.EEⒽ p
FULL ERASEⓁ q
A.HSW r
PB CTL s
REC SELECT t
NTSCⓁ u
A.DUBⒽ v
FF/REWⓁ w
REVⒽ x

(DIODE: 1SS133)

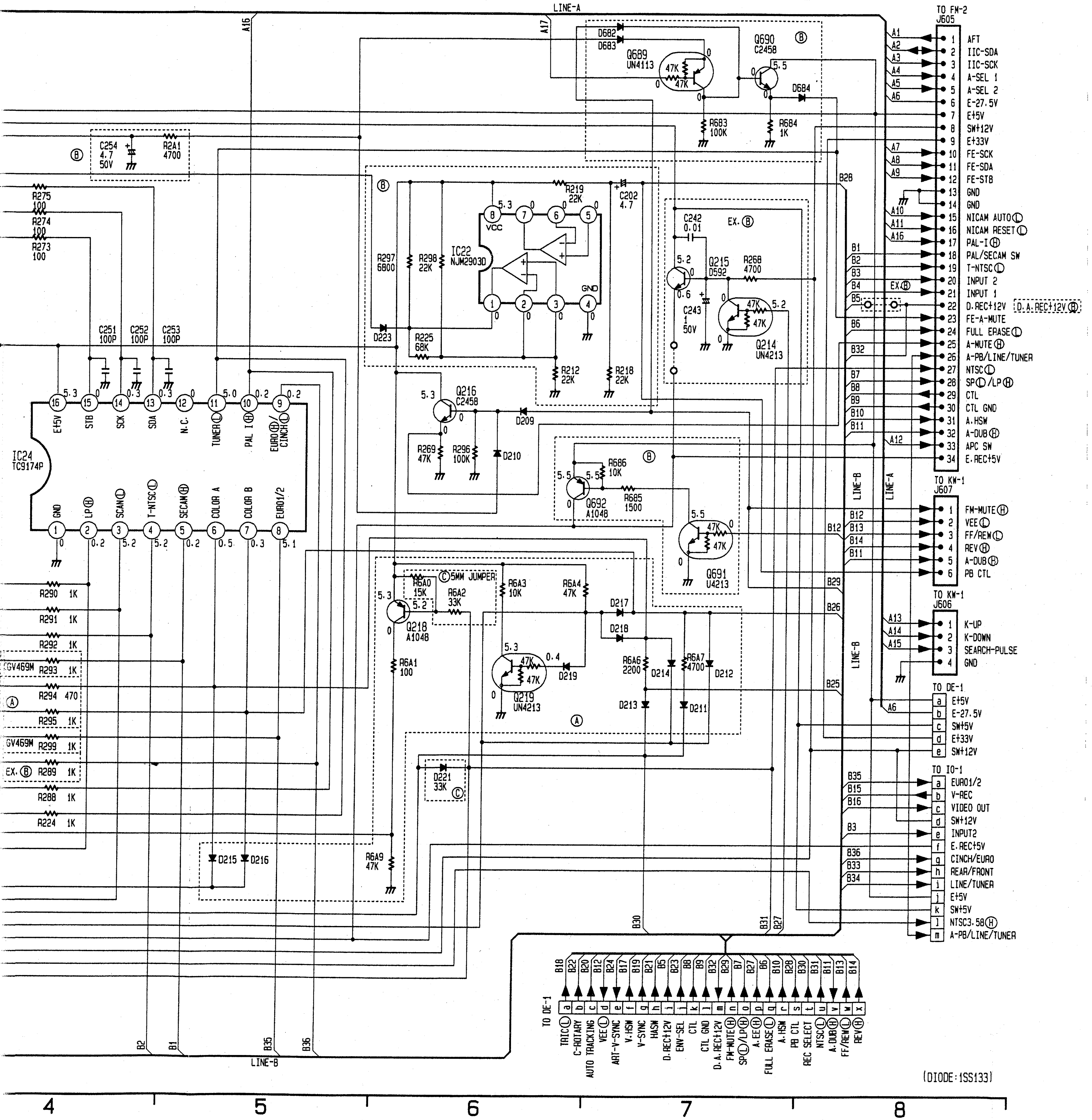
MATIC DIAGRAM (DE-3)

PMO1

Ⓐ VR863 VR763 VR773 VR663 GV469M VR900 VR963

Ⓑ VR900 VR963

Ⓒ MV433 MV633



LINE-A
LINE-B
A16
A17
D682
D683
Q689 UN4113
Q690 C2458
D684
R683 100K
R684 1K
C254 4.7 50V
R2A1 4700
R275 100
R274 100
R273 100
R219 22K
C202 4.7
IC22 NJM2903D
R297 6800
R298 22K
D223
R225 68K
R212 22K
R218 22K
C242 0.01
Q215 D592
R268 4700
C243 1 50V
Q214 UN4213
EX.Ⓑ
C251 100P
C252 100P
C253 100P
IC24 TC9174P
E+5V
STB
SCK
SDA
N.C
TUNERⓁ
PAL IⒽ
EURO Ⓗ/CINCHⓁ
GND
LPⒽ
SCANⓁ
T-NTSCⓁ
SECAMⒽ
COLOR A
COLOR B
EURO1/2
Q216 C2458
D209
R269 47K
R296 100K
D210
Q692 A1048
R686 10K
R685 1500
Q691 U4213
R290 1K
R291 1K
R292 1K
R293 1K
R294 470
R295 1K
R299 1K
R289 1K
R288 1K
R224 1K
Q218 A1048
R6A0 15K
Ⓒ 5MM JUMPER
R6A2 33K
R6A3 10K
R6A4 47K
D217
D218
R6A1 100
Q219 UN4213
D219
R6A6 2200
D214
R6A7 4700
D212
D213
D211
D221 33K
D215
D216
R6A9 47K
TO FM-2 J605
AFT
IIC-SDA
IIC-SCK
A-SEL 1
A-SEL 2
E-27.5V
E+5V
SW+12V
E+33V
FE-SCK
FE-SDA
FE-STB
GND
NICAM AUTOⓁ
NICAM RESETⓁ
PAL-IⒽ
PAL/SECAM SW
T-NTSCⓁ
INPUT 2
INPUT 1
D.REC+12V
FE-A-MUTE
FULL ERASEⓁ
A-MUTEⒽ
A-PB/LINE/TUNER
NTSCⓁ
SPⓁ/LPⒽ
CTL
CTL GND
A.HSW
A-DUBⒽ
APC SW
E.REC+5V
D.A.REC+12VⒷ
TO KW-1 J607
FM-MUTEⒽ
VEEⓁ
FF/REWⓁ
REVⒽ
A-DUBⒽ
PB CTL
TO KW-1 J606
K-UP
K-DOWN
SEARCH-PULSE
GND
TO DE-1
E+5V
E-27.5V
SW+5V
E+33V
SW+12V
TO IO-1
EURO1/2
V-REC
VIDEO OUT
SW+12V
INPUT2
E.REC+5V
CINCH/EURO
REAR/FRONT
LINE/TUNER
E+5V
SW+5V
NTSC3.58Ⓗ
A-PB/LINE/TUNER
TO DE-1
TRICⓁ
C-ROTARY
AUTO TRACKING
VEEⓁ
ART-V-SYNC
V.HSW
V-SYNC
HASW
D.REC+12V
ENV-SEL
CTL
CTL GND
D.A.REC+12V
FM-MUTEⒽ
SPⓁ/LPⒽ
A.EEⒽ
FULL ERASEⓁ
A.HSW
PB CTL
REC SELECT
NTSCⓁ
A.DUBⒽ
FF/REWⓁ
REVⒽ
(DIODE:1SS133)
4
5
6
7
8

CAPACITORS	
C202	B7
C242	B7
C243	C7
C244	C2
C245	C2
C246	C3
C247	C3
C248	C3
C249	C3
C250	C4
C251	C4
C252	C4
C253	C5
C254	B4

DIODES	
D209	C6
D210	C6
D211	E7
D212	D7
D213	E7
D214	D7
D215	E5
D216	E5
D217	D7
D218	D7
D219	D6
D221	E6
D223	C6
D682	A7
D683	A7
D684	B7

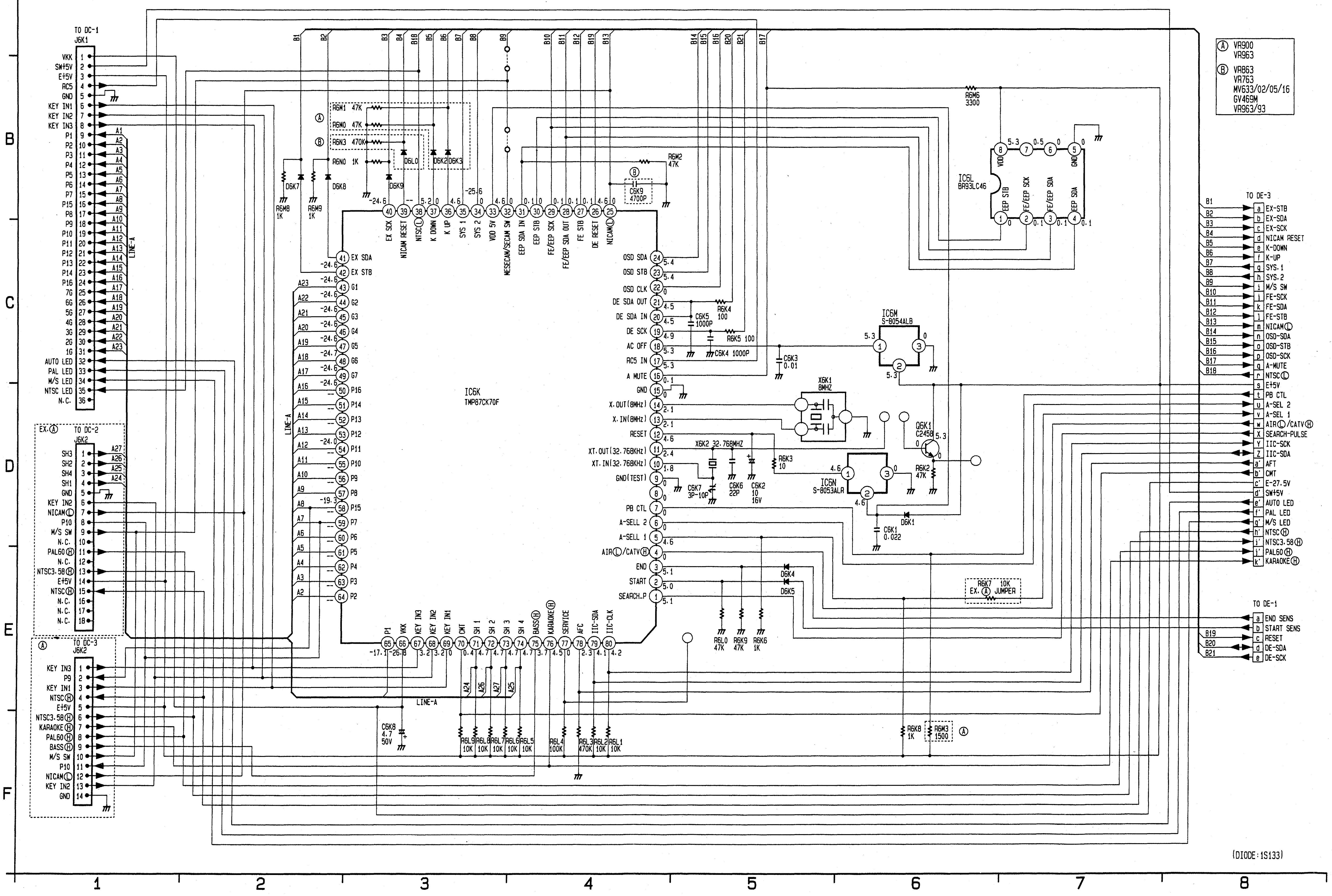
ICs	
IC22	B6
IC23	C3
IC24	C4

CONNECTORS	
J605	B8
J606	D8
J607	D8
J608	E1

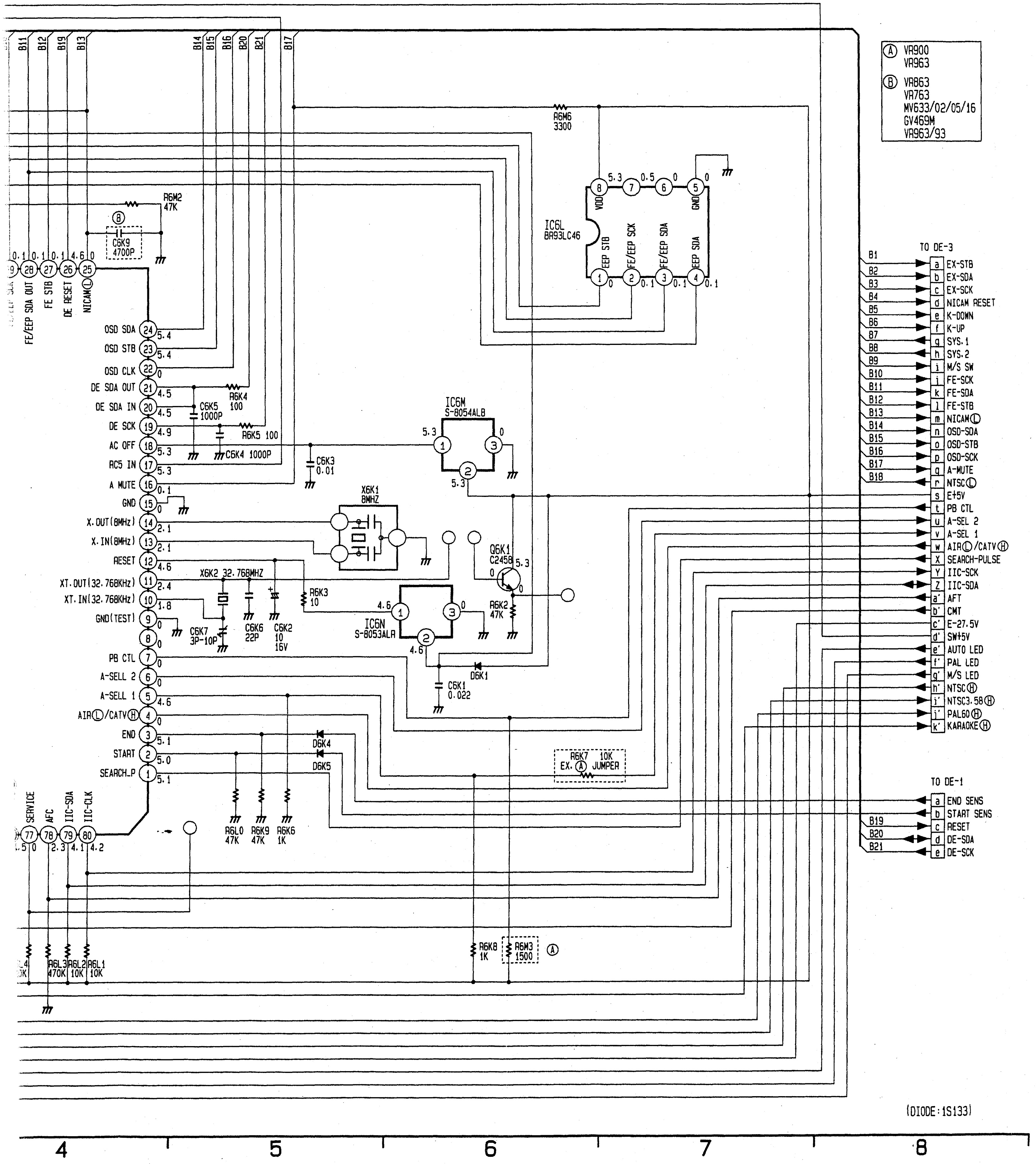
TRANSISTORS	
Q214	C7
Q215	B7
Q216	C6
Q218	D6
Q219	D6
Q689	B7
Q690	B7
Q691	D7
Q692	D6

RESISTORS	
R212	C6
R218	C7
R219	B6
R224	E4
R225	C6
R268	B7
R269	C6
R270	C3
R271	C3
R272	B3
R273	B4
R274	B4
R275	B4
R279	D2
R280	D2
R281	D2
R282	D2
R283	D2
R284	E2
R288	E4
R289	E4
R290	D4
R291	D4
R292	D4
R293	D4
R294	D4
R295	E4
R296	C6
R297	B6
R298	B6
R299	E4
R2A1	B5
R683	B7
R684	B7
R685	D7
R686	C7
R6A0	D6
R6A1	D6
R6A2	D6
R6A3	D6
R6A4	D6
R6A5	C2
R6A6	D7
R6A7	D7
R6A8	D1
R6A9	E6

TIMER TUNING SCHEMATIC DIAGRAM (TT) PM01


Ⓐ VR900
VR963
Ⓑ VR863
VR763
MV633/02/05/16
GV469M
VR963/93
TO DC-1
J6K1
VKK 1
SW+5V 2
E+5V 3
RC5 4
GND 5
KEY IN1 6
KEY IN2 7
KEY IN3 8
P1 9
P2 10
P3 11
P4 12
P5 13
P6 14
P7 15
P15 16
P8 17
P9 18
P10 19
P11 20
P12 21
P13 22
P14 23
P16 24
7G 25
6G 26
5G 27
4G 28
3G 29
2G 30
1G 31
AUTO LED 32
PAL LED 33
M/S LED 34
NTSC LED 35
N.C. 36
LINE-A
EX.Ⓐ TO DC-2
J6K2
SH3 1
SH2 2
SH4 3
SH1 4
GND 5
KEY IN2 6
NICAMⓁ 7
P10 8
M/S SW 9
N.C. 10
PAL60Ⓗ 11
N.C. 12
NTSC3.58Ⓗ 13
E+5V 14
NTSCⒽ 15
N.C. 16
N.C. 17
N.C. 18
Ⓐ TO DC-3
J6K2
KEY IN3 1
P9 2
KEY IN1 3
NTSCⒽ 4
E+5V 5
NTSC3.58Ⓗ 6
KARAOKEⒽ 7
PAL60Ⓗ 8
BASSⒽ 9
M/S SW 10
P10 11
NICAMⓁ 12
KEY IN2 13
GND 14
IC6K
TMP87CK70F
R6M1 47K
R6N0 47K
R6N3 470K
R6N0 1K
D6L0
D6K2
D6K3
D6K7
D6K8
D6K9
R6M8 1K
R6M9 1K
R6M2 47K
C6K9 4700P
R6M6 3300
IC6L
BR93LC46
VDD
GND
EEP STB
FE/EEP SCK
FE/EEP SDA
EEP SDA
EX SCK
NICAM RESET
NTSCⓁ
K DOWN
K UP
SYS 1
SYS 2
VDD 5V
MESECAM/SECAM SW
EEP SDA IN
EEP STB
FE/EEP SCK
FE/EEP SDA OUT
FE STB
DE RESET
NICAMⓁ
EX SDA
EX STB
G1
G2
G3
G4
G6
G5
G7
P16
P14
P13
P12
P11
P10
P9
P8
P15
P7
P6
P5
P4
P3
P2
OSD SDA
OSD STB
OSD CLK
DE SDA OUT
DE SDA IN
DE SCK
AC OFF
RC5 IN
A MUTE
GND
X.OUT(8MHz)
X.IN(8MHz)
RESET
XT.OUT(32.768KHz)
XT.IN(32.768KHz)
GND(TEST)
PB CTL
A-SELL 2
A-SELL 1
AIRⓁ/CATVⒽ
END
START
SEARCH_P
C6K5 1000P
R6K4 100
R6K5 100
C6K4 1000P
C6K3 0.01
IC6M
S-8054ALB
X6K1
8MHZ
X6K2 32.768MHZ
R6K3 10
C6K7 3P-10P
C6K6 22P
C6K2 10 16V
IC6N
S-8053ALB
Q6K1
C2458
R6K2 47K
C6K1 0.022
D6K1
D6K4
D6K5
R6L0 47K
R6K9 47K
R6K6 1K
R6K7 10K
EX.Ⓐ JUMPER
R6K8 1K
R6M3 1500
P1
VKK
KEY IN3
KEY IN2
KEY IN1
CMT
SH 1
SH 2
SH 3
SH 4
BASSⒽ
KARAOKEⒽ
SERVICE
AFC
IIC-SDA
IIC-CLK
LINE-A
C6K8 4.7 50V
R6L9 10K
R6L8 10K
R6L7 10K
R6L6 10K
R6L5 10K
R6L4 100K
R6L3 470K
R6L2 10K
R6L1 10K
TO DE-3
a EX-STB
b EX-SDA
c EX-SCK
d NICAM RESET
e K-DOWN
f K-UP
g SYS.1
h SYS.2
i M/S SW
j FE-SCK
k FE-SDA
l FE-STB
m NICAMⓁ
n OSD-SDA
o OSD-STB
p OSD-SCK
q A-MUTE
r NTSCⓁ
s E+5V
t PB CTL
u A-SEL 2
v A-SEL 1
w AIRⓁ/CATVⒽ
x SEARCH-PULSE
y IIC-SCK
z IIC-SDA
a' AFT
b' CMT
c' E-27.5V
d' SW+5V
e' AUTO LED
f' PAL LED
g' M/S LED
h' NTSCⒽ
i' NTSC3.58Ⓗ
j' PAL60Ⓗ
k' KARAOKEⒽ
TO DE-1
a END SENS
b START SENS
c RESET
d DE-SDA
e DE-SCK
(DIODE:1S133)
A
B
C
D
E
F
1
2
3
4
5
6
7
8

TIC DIAGRAM (TT) PM01



Ⓐ VR900 VR963
Ⓑ VR863 VR763 MV633/02/05/16 GV469M VR963/93
R6M6 3300
IC6L BR93LC46
VDD
GND
EEP STB
FE/EEP SCK
FE/EEP SDA
EEP SDA
R6M2 47K
C6K9 4700P
FE/EEP SDA OUT
FE STB
DE RESET
NICAMⓁ
OSD SDA 24
OSD STB 23
OSD CLK 22
DE SDA OUT 21
DE SDA IN 20
DE SCK 19
AC OFF 18
RC5 IN 17
A MUTE 16
GND 15
X.OUT(8MHz) 14
X.IN(8MHz) 13
RESET 12
XT.OUT(32.768KHz) 11
XT.IN(32.768KHz) 10
GND(TEST) 9
PB CTL 7
A-SELL 2 6
A-SELL 1 5
AIRⓁ/CATVⒽ 4
END 3
START 2
SEARCH_P 1
C6K5 1000P
R6K4 100
R6K5 100
C6K4 1000P
C6K3 0.01
IC6M S-8054ALB
X6K1 8MHZ
X6K2 32.768MHZ
R6K3 10
C6K7 3P-10P
C6K6 22P
C6K2 10 16V
IC6N S-8053ALR
Q6K1 C2458
R6K2 47K
C6K1 0.022
D6K1
D6K4
D6K5
R6K7 10K EX.Ⓐ JUMPER
R6L0 47K
R6K9 47K
R6K6 1K
SERVICE
AFC
IIC-SDA
IIC-CLK
R6L3 470K
R6L2 10K
R6L1 10K
R6K8 1K
R6M3 1500 Ⓐ
TO DE-3
B1 a EX-STB
B2 b EX-SDA
B3 c EX-SCK
B4 d NICAM RESET
B5 e K-DOWN
B6 f K-UP
B7 g SYS.1
B8 h SYS.2
B9 i M/S SW
B10 j FE-SCK
B11 k FE-SDA
B12 l FE-STB
B13 m NICAMⓁ
B14 n OSD-SDA
B15 o OSD-STB
B16 p OSD-SCK
B17 q A-MUTE
B18 r NTSCⓁ
s E+5V
t PB CTL
u A-SEL 2
v A-SEL 1
w AIRⓁ/CATVⒽ
x SEARCH-PULSE
y IIC-SCK
z IIC-SDA
a' AFT
b' CMT
c' E-27.5V
d' SW+5V
e' AUTO LED
f' PAL LED
g' M/S LED
h' NTSCⒽ
i' NTSC3.58Ⓗ
j' PAL60Ⓗ
k' KARAOKEⒽ
TO DE-1
B19 a END SENS
b START SENS
c RESET
B20 d DE-SDA
B21 e DE-SCK
4
5
6
7
8

(DIODE:1S133)

CAPACITORS	
C6K1	D6
C6K2	D5
C6K3	C5
C6K4	C5
C6K5	C5
C6K6	D5
C6K7	D5
C6K8	F3
C6K9	B4

DIODES	
D6K1	D6
D6K2	B3
D6K3	B3
D6K4	E5
D6K5	E5
D6K7	B2
D6K8	B2
D6K9	B3
D6L0	B3

ICs	
IC6K	C2
IC6L	B7
IC6M	C6
IC6N	D6

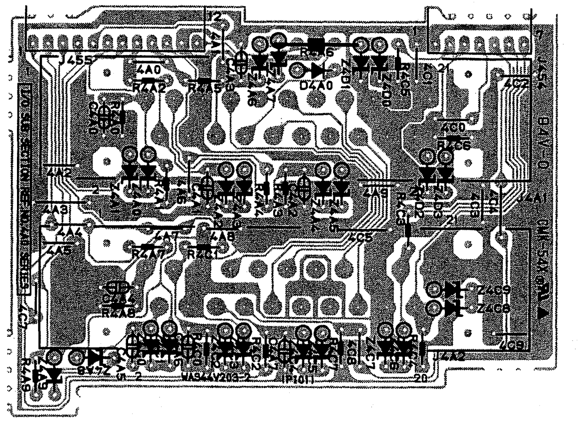
CONNECTORS	
J6K1	B1
J6K2	D1
J6K2	F1

TRANSISTOR	
Q6K1	D6

RESISTORS	
R6K2	D6
R6K3	D5
R6K4	C5
R6K5	C5
R6K6	E5
R6K7	E6
R6K8	F6
R6K9	E5
R6L0	E5
R6L1	F4
R6L2	F4
R6L3	F4
R6L4	F4
R6L5	F4
R6L6	F3
R6L7	F3
R6L8	F3
R6L9	F3
R6M0	B3
R6M1	B3
R6M2	B4
R6M3	F6
R6M6	B6
R6M8	B2
R6M9	B2
R6N0	B3
R6N3	B3

X'TALS	
X6K1	D5
X6K2	D5

EURO AV PCB DRAWING PI01


J455
J454
D4A0
J4A1
J4A2
PI01
A
B
1
2
3

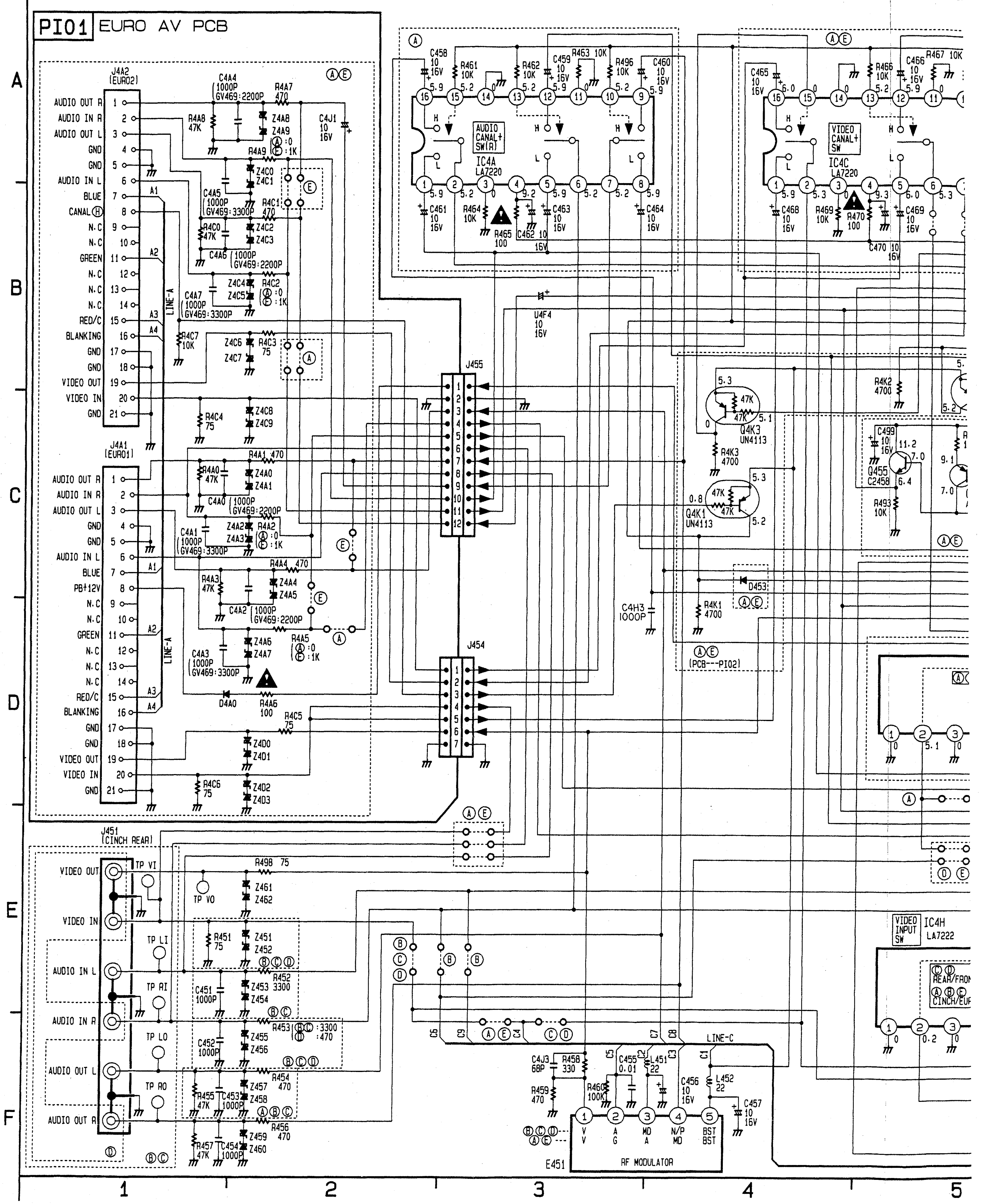
"Inserted components are dependent on set type"

CAPACITORS	
C4A0	A1
C4A1	B1
C4A2	B1
C4A3	A1
C4A4	B1
C4A5	B1
C4A6	B1
C4A7	B1
D4A0	A1
CONNECTORS	
J454	A2
J455	A1
J4A1	B2
J4A2	B2
RESISTORS	
R4A0	A1
R4A1	B1
R4A2	A1
R4A3	B1
R4A4	B1
R4A5	A1
R4A6	A1
R4A7	B1
R4A8	B1
R4A9	B1
R4C0	B1
R4C1	B1
R4C2	B1
R4C3	B2
R4C4	B2
R4C5	A2
R4C6	A2
R4C7	B2
ZENERS	
Z4A0	B1
Z4A1	B1
Z4A2	B1
Z4A3	B1
Z4A4	B1
Z4A5	B2
Z4A6	A1
Z4A7	A1
Z4A8	B1
Z4A9	B1
Z4C0	B1
Z4C1	B1
Z4C2	B1
Z4C3	B1
Z4C4	B1
Z4C5	B1
Z4C6	B2
Z4C7	B2
Z4C8	B2
Z4C9	B2
Z4D0	A2
Z4D1	A2
Z4D2	B2
Z4D3	B2

PM01 (IO-1)

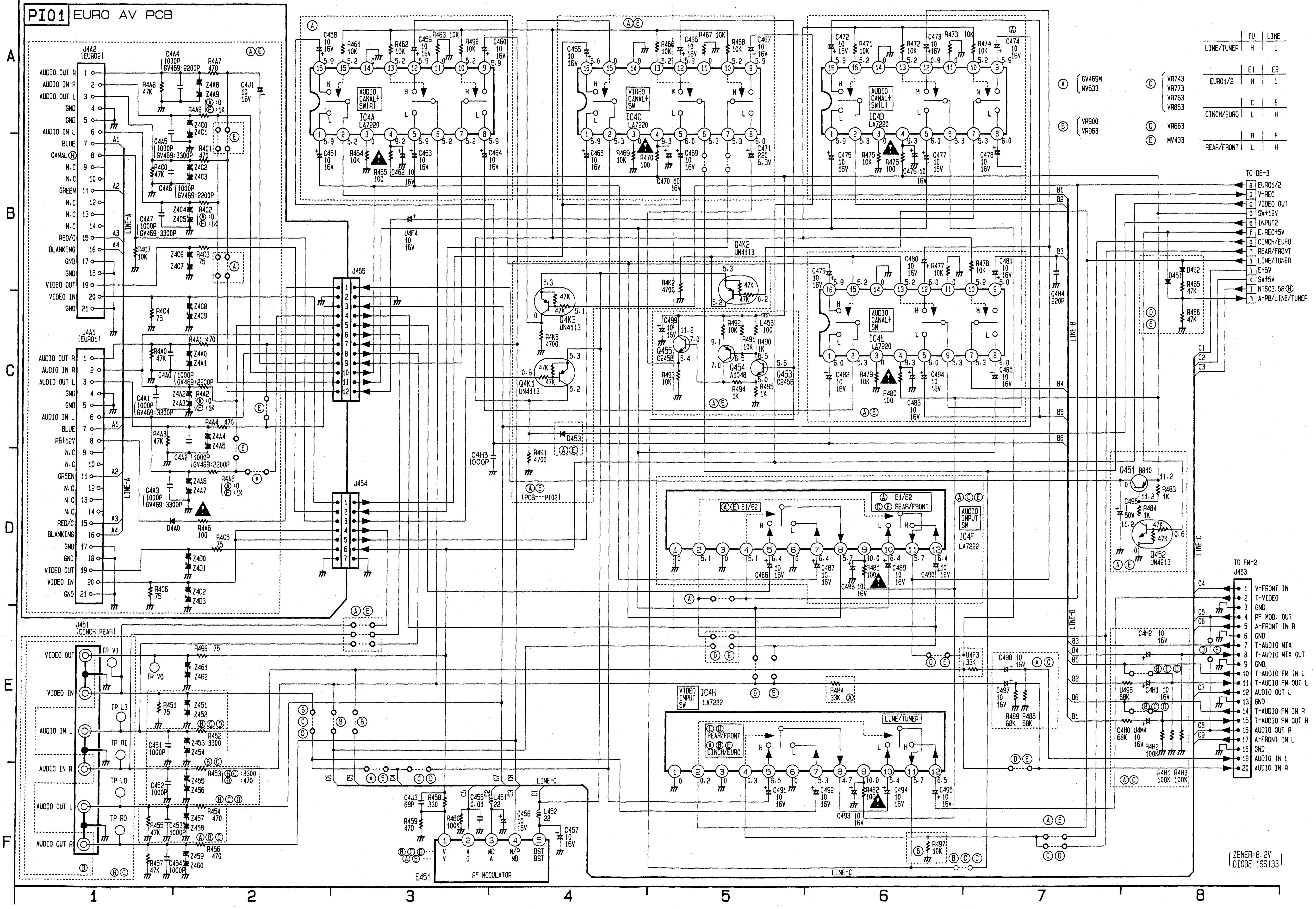
CAPACITORS	
C451	E1
C452	F1
C453	F1
C454	F1
C455	F3
C456	F4
C457	F4
C458	A2
C459	A3
C460	A3
C461	B2
C462	B3
C463	B3
C464	B3
C465	A4
C466	A5
C467	A5
C468	B4
C470	B5
C471	B5
C472	A6
C473	A6
C474	A7
C475	B6
C476	B6
C477	B6
C478	B7
C479	B6
C480	B6
C481	B7
C482	C6
C483	C6
C484	C6
C485	C7
C486	D5
C487	D6
C488	D6
C489	D6
C490	D6
C491	F5
C492	F6
C493	F6
C494	F6
C495	F6
C496	D8
C497	E7
C498	E7
C499	C5
C4A0	C1
C4A1	C1
C4A2	C2
C4A3	D1
C4A4	A1
C4A5	A1
C4A6	B1
C4A7	B1
C4H0	E8
C4H1	E8
C4H2	E8
C4H4	B7
C4J1	A2
C4J3	F3
U4F4	B3
U4M4	E8
DIODES	
D451	B8
D452	B8
D453	C4
D4A0	D1
RF-MODULATOR	
E451	F3
ICs	
IC4A	A3
IC4C	A4
IC4D	A6
IC4E	C6
IC4F	D7
IC4H	E5
CONNECTORS	
J451	E1
J453	E8
J454	D3
J455	C3
J4A1	D1
J4A2	B1
COILS	
L451	F4
L452	F4
L453	C5
TRANSISTORS	
Q451	D8
Q452	D8
Q453	C5
Q454	C5
Q455	C5
Q4K1	C4
Q4K2	B5
Q4K3	C4
RESISTORS	
R451	E1
R452	E2
R453	F2
R454	F2
R455	F1
R456	F2
R457	F1
R458	F3
R459	F3
R460	F3
R461	A3
R462	A3
R463	A3
R464	B3
R465	B3
R466	A5
R467	A5
R468	A5
R469	B4
R470	B5
R471	A6
R472	A6
R473	A6
R474	A7
R475	B6
R476	B6
R477	B6
R478	B7
R479	C6
R480	C6
R481	D6
R482	F6
R483	D8
R484	D8
R485	C8
R486	C8
R488	E7
R489	E7
R490	C5
R491	C5
R492	C5
R493	C5
R494	C5
R495	C5
R496	A3
R497	F6
R498	E2
R4A0	C1
R4A1	C2
R4A2	C2
R4A3	C1
R4A4	C2
R4A5	D2
R4A6	D2
R4A7	A2
R4A8	A1
R4A9	A2
R4C0	B1
R4C1	B2
R4C2	B2
R4C3	B2
R4C4	C1
R4C5	D2
R4C6	D1
R4C7	B1
R4H1	E8
R4H2	E8
R4H3	E8
R4H4	E6
R4K1	D4
R4K2	B5
R4K3	C4
U496	E8
U4F3	E7
ZENERS	
Z451	E2
Z452	E2
Z453	E2
Z454	E2
Z455	F2
Z456	F2
Z457	F2
Z458	F2
Z459	F2
Z460	F2
Z461	E2
Z462	E2
Z4A0	C2
Z4A1	C2
Z4A2	C2
Z4A3	C2
Z4A4	C2
Z4A5	C2
Z4A6	D2
Z4A7	D2
Z4A8	A2
Z4A9	A2
Z4C0	A2
Z4C1	A2
Z4C2	B2
Z4C4	B2
Z4C5	B2
Z4C6	B2
Z4C7	B2
Z4C8	C2
Z4C9	C2
Z4D0	D2
Z4D1	D2
Z4D2	D2
Z4D3	D2

AUDIO⁄VIDEO SELECTOR SCHE

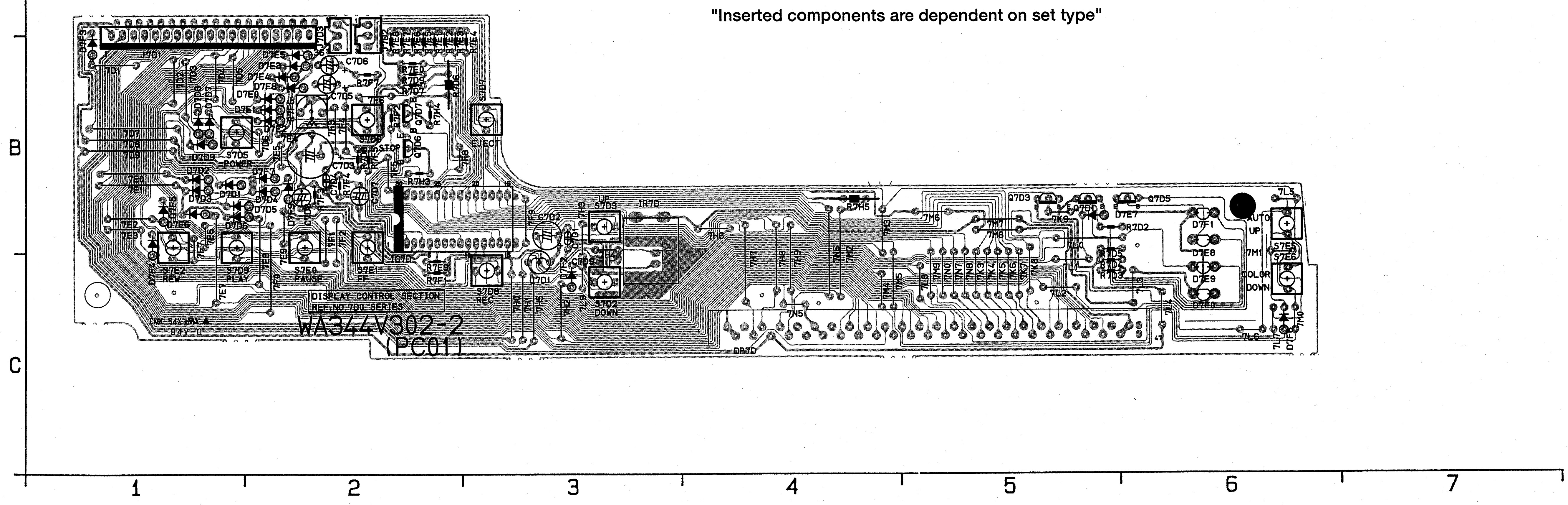

PI01 EURO AV PCB
J4A2 (EURO2)
J4A1 (EURO1)
AUDIO OUT R
AUDIO IN R
AUDIO OUT L
GND
AUDIO IN L
BLUE
CANAL+
PB+12V
N.C
GREEN
RED/C
BLANKING
VIDEO OUT
VIDEO IN
LINE-A
J455
J454
U4F4 10 16V
IC4A LA7220
AUDIO CANAL+ SW(R)
IC4C LA7220
VIDEO CANAL+ SW
Q4K3 UN4113
Q4K1 UN4113
Q455 C2458
D453
(PCB--PI02)
C4H3 1000P
J451 (CINCH REAR)
TP VI
TP VO
TP LI
TP RI
TP LO
TP RO
IC4H LA7222
VIDEO INPUT SW
REAR/FROM CINCH/EUR
LINE-C
E451
RF MODULATOR
V
A
MD
N/P
BST
A
B
C
D
E
F
1
2
3
4
5

A2	Z4C1	B1
A2	Z4C2	B1
B2	Z4C3	B1
	Z4C4	B1
RS	Z4C5	B1
B1	Z4C6	B2
B1	Z4C7	B2
B1	Z4C8	B2
B1	Z4C9	B2
B1	Z4D0	A2
B2	Z4D1	A2
A1	Z4D2	B2
A1	Z4D3	B2
B1		
B1		
B1		

AUDIO/VIDEO SELECTOR SCHEMATIC DIAGRAM (IO-1) PM01


PI01 EURO AV PCB
J4A2 (EURO2)
J4A1 (EURO1)
AUDIO OUT R
AUDIO IN R
AUDIO OUT L
GND
AUDIO IN L
BLUE
CANAL+
PB+12V
N.C
GREEN
RED/C
BLANKING
VIDEO OUT
VIDEO IN
LINE-A
J455
J454
J451 (CINCH REAR)
TP VI
TP VO
TP LI
TP RI
TP LO
TP RO
IC4A LA7220 AUDIO CANAL+ SW(R)
IC4C LA7220 VIDEO CANAL+ SW
IC4D LA7220 AUDIO CANAL+ SW(L)
IC4E LA7220 AUDIO CANAL+ SW
IC4F LA7222 AUDIO INPUT SW
IC4H LA7222 VIDEO INPUT SW
Q4K1 UN4113
Q4K2 UN4113
Q4K3 UN4113
Q451 BB10
Q452 UN4213
Q453 C2458
Q454 A1048
Q455 C2458
D453
D451
D452
D4A0
E451 RF MODULATOR
V A MD N/P BST
(PCB---PI02)
LINE-B
LINE-C
Ⓐ GV469M MV633
Ⓑ VR900 VR963
Ⓒ VR743 VR773 VR763 VR863
Ⓓ VR663
Ⓔ MV433
| TU | LINE
LINE/TUNER | H | L
| E1 | E2
EURO1/2 | H | L
| C | E
CINCH/EURO | L | H
| R | F
REAR/FRONT | L | H
TO DE-3
a EURO1/2
b V-REC
c VIDEO OUT
d SW+12V
e INPUT2
f E.REC+5V
g CINCH/EURO
h REAR/FRONT
i LINE/TUNER
j E+5V
k SW+5V
l NTSC3.58Ⓗ
m A-PB/LINE/TUNER
TO FM-2
J453
1 V-FRONT IN
2 T-VIDEO
3 GND
4 RF MOD. OUT
5 A-FRONT IN R
6 GND
7 T-AUDIO MIX
8 T-AUDIO MIX OUT
9 GND
10 T-AUDIO FM IN L
11 T-AUDIO FM OUT L
12 AUDIO OUT L
13 GND
14 T-AUDIO FM IN R
15 T-AUDIO FM OUT R
16 AUDIO OUT R
17 A-FRONT IN L
18 GND
19 AUDIO IN L
20 AUDIO IN R
ZENER: 8.2V
DIODE: 1SS133
A B C D E F
1 2 3 4 5 6 7 8

DISPLAY CONTROL PCB DRAWING PC01


A
B
C
1
2
3
4
5
6
7
J7D1
S7D5
POWER
S7E2
REW
S7D9
PLAY
S7E0
PAUSE
S7E1
FF
S7D8
REC
S7D3
UP
S7D2
DOWN
S7D7
EJECT
STOP
IR7D
IC7D
AUTO
UP
COLOR
DOWN
S7E5
S7E6
DP7D
DISPLAY CONTROL SECTION
REF.NO.7D0 SERIES
WA344V302-2
(PC01)
94V-0

"Inserted components are dependent on set type"

CAPACITORS
C7D1 B3
C7D2 B3
C7D3 B2
C7D4 B2
C7D5 B2
C7D6 B2
C7D7 B2
C7D8 B2
C7D9 C3

DIODES
D7D1 B1
D7D2 B1
D7D3 B1
D7D4 B2
D7D5 B1
D7D6 B1
D7D7 B1
D7D8 B1
D7D9 B1
D7E0 B2
D7E1 B2
D7E2 B2
D7E3 B2
D7E4 B2
D7E5 B2
D7E6 B1
D7E7 B5
D7E8 B6
D7E9 C6
D7F0 C6
D7F1 B6
D7F2 C3
D7F3 B1
D7F4 B1
D7F5 B1
D7F6 C6
D7F7 B2
D7F8 B2
D7F9 B2

FL-DISPLAY
DP7D C5

IR-RECEIVER
IR7D B3

IC
IC7D B2

CONNECTORS
J7D1 B1
J7D2 B2
J7D3 B2

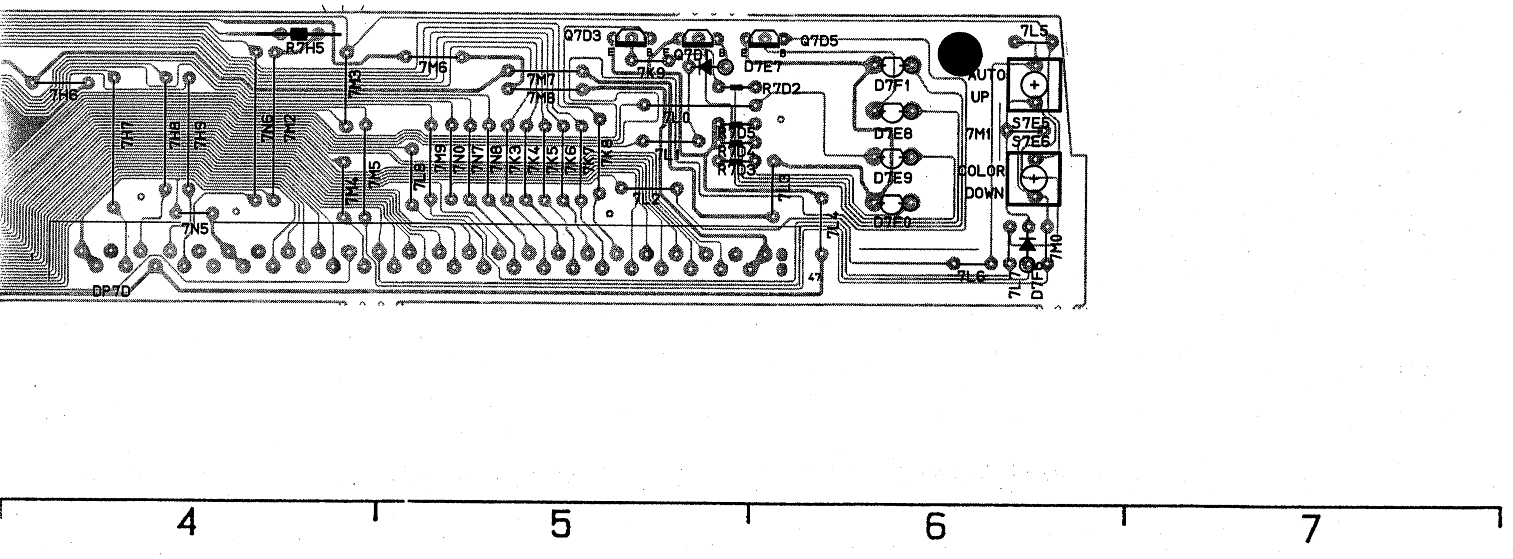
COIL
L7D1 C3

TRANSISTORS
Q7D1 B5
Q7D3 B5
Q7D5 B6
Q7D6 B2
Q7D7 B2

RESISTORS
R7D2 B5
R7D3 C5
R7D4 C5
R7D5 B5
R7D6 B2
R7D7 B2
R7D8 B2
R7D9 B2
R7E0 B2
R7E1 B2
R7E2 B2
R7E3 B2
R7E4 B3
R7E5 B2
R7E6 B2
R7E7 B2
R7E8 B2
R7E9 C2
R7F1 C2
R7F2 B2
R7F3 B2
R7F4 B2
R7F5 B2
R7F6 B2
R7F7 B2
R7H3 B2
R7H4 B2
R7H5 B4

SWITCHES
S7D2 C3
S7D3 B3
S7D5 B1
S7D6 B2
S7D7 B3
S7D8 C3
S7D9 B1
S7E0 B2
S7E1 B2
S7E2 B1
S7E5 B6
S7E6 C6

"Inserted components are dependent on set type"



R7H5
Q7D3
Q7D1
Q7D5
7L5
D7E7
R7D2
D7F1
AUTO
UP
7M1
S7E5
S7E6
D7E8
COLOR
DOWN
D7E9
D7F0
7H6
7H7
7H8
7H9
7N6
7M2
7N3
7M6
7M7
7M8
7K9
7L0
R7D5
R7D4
R7D3
7N5
7M4
7M5
7L8
7M9
7N0
7N7
7N8
7K3
7K4
7K5
7K6
7K7
7K8
7L2
7L3
7L1
7L6
7L7
7H0
DP7D
47
4
5
6
7

R

RS

COIL	
L7D1	C3

TRANSISTORS	
Q7D1	B5
Q7D3	B5
Q7D5	B6
Q7D6	B2
Q7D7	B2

RESISTORS	
R7D2	B5
R7D3	C5
R7D4	C5
R7D5	B5
R7D6	B2
R7D7	B2
R7D8	B2
R7D9	B2
R7E0	B2
R7E1	B2
R7E2	B2
R7E3	B2
R7E4	B3
R7E5	B2
R7E6	B2
R7E7	B2
R7E8	B2
R7E9	C2
R7F1	C2
R7F2	B2
R7F3	B2
R7F4	B2
R7F5	B2
R7F6	B2
R7F7	B2
R7H3	B2
R7H4	B2
R7H5	B4

SWITCHES	
S7D2	C3
S7D3	B3
S7D5	B1
S7D6	B2
S7D7	B3
S7D8	C3
S7D9	B1
S7E0	B2
S7E1	B2
S7E2	B1
S7E5	B6
S7E6	C6

PC01 (DC-1)

CAPACITORS	
C7D1	B7
C7D2	B7
C7D3	D1
C7D4	D2
C7D5	E1
C7D6	E1
C7D7	E2
C7D8	E3
C7D9	B7

DIODES	
D7D1	D7
D7D2	E7
D7D3	E7
D7D4	D7
D7D5	E7
D7D6	E7
D7D7	D7
D7D8	E7
D7D9	E7
D7E0	D8
D7E1	E7
D7E2	E7
D7E3	D8
D7E4	E8
D7E5	E8
D7E6	D7
D7E7	D5
D7E8	F5
D7E9	F5
D7F0	F5
D7F1	E5
D7F2	D6
D7F3	D6
D7F4	D6
D7F5	D6
D7F6	D6
D7F7	E7
D7F8	E7
D7F9	E7

FL-DISPLAY	
DP7D	B3

IR-RECEIVER	
IR7D	B8

IC	
IC7D	E3

CONNECTORS	
J7D1	C8
J7D2	B8
J7D3	E1

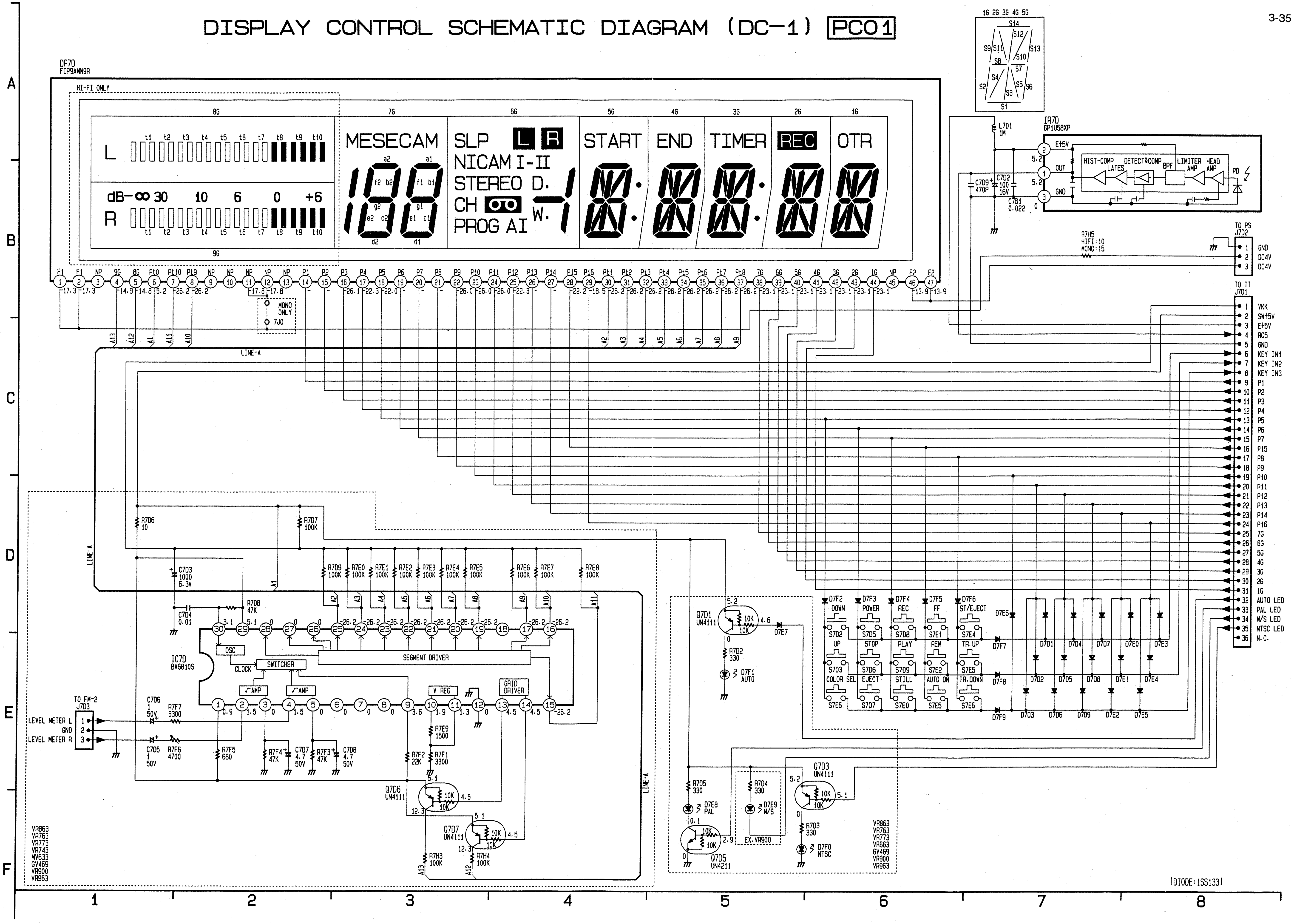
COIL	
L7D1	A7

TRANSISTORS	
Q7D1	D5
Q7D3	F5
Q7D5	F5
Q7D6	F3
Q7D7	F3

RESISTORS	
R7D2	E5
R7D3	F5
R7D4	E5
R7D5	E5
R7D6	D1
R7D7	D2
R7D8	D2
R7D9	D2
R7E0	D3
R7E1	D3
R7E2	D3
R7E3	D3
R7E4	D3
R7E5	D3
R7E6	D4
R7E7	D4
R7E8	D4
R7E9	E3
R7F1	E3
R7F2	E3
R7F3	E2
R7F4	E2
R7F5	E2
R7F6	E1
R7F7	E1
R7H3	F3
R7H4	F3
R7H5	B7

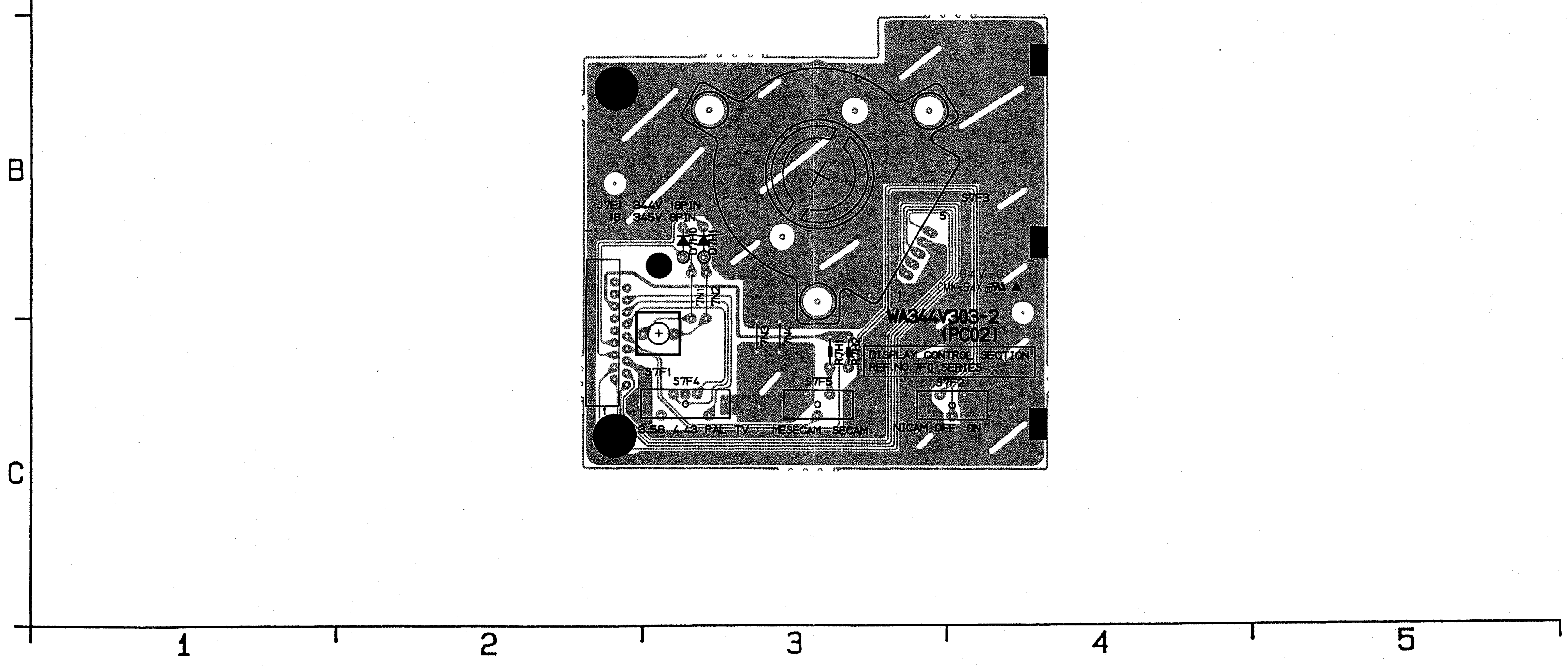
SWITCHES	
S7D2	D6
S7D3	E6
S7D5	D6
S7D6	E6
S7D7	E6
S7D8	D6
S7D9	E6
S7E0	E6
S7E1	D6
S7E2	E6
S7E4	D7
S7E5	E6
S7E5	E7
S7E6	E6
S7E6	E7

DISPLAY CONTROL SCHEMATIC DIAGRAM (DC-1) PCO1


DP7D
FIP9AMW9A
HI-FI ONLY
8G 7G 6G 5G 4G 3G 2G 1G
L
dB-∞ 30 10 6 0 +6
R
t1 t2 t3 t4 t5 t6 t7 t8 t9 t10
9G
MESECAM
SLP L R
NICAM I-II
STEREO D.
CH
PROG AI
W.
START
END
TIMER
REC
OTR
F1 F1 NP 9G 8G Pt0 Pt10 Pt9 NP NP NP NP NP P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 Pt1 Pt2 Pt3 Pt4 Pt5 Pt6 Pt7 Pt8 7G 6G 5G 4G 3G 2G 1G NP F2 F2
MONO ONLY
7J0
A13 A12 A1 A11 A10
A2 A3 A4 A5 A6 A7 A8 A9
LINE-A
1G 2G 3G 4G 5G
S14 S12 S9 S11 S13 S8 S10 S7 S4 S2 S3 S5 S6 S1
IR7D
GP1U58XP
L7D1
1M
E+5V
OUT
GND
HIST-COMP
LATES
DETECT&COMP
BPF
LIMITER AMP
HEAD AMP
PD
C7D9
470P
C7D2
100
16V
C7D1
0.022
R7H5
HIFI:10
MONO:15
TO PS
J7D2
GND
DC4V
DC4V
TO TT
J7D1
VKK
SW+5V
E+5V
RC5
GND
KEY IN1
KEY IN2
KEY IN3
P1 P2 P3 P4 P5 P6 P7 P15 P8 P9 P10 P11 P12 P13 P14 P16
7G 6G 5G 4G 3G 2G 1G
AUTO LED
PAL LED
M/S LED
NTSC LED
N.C.
R7D6
10
R7D7
100K
C7D3
1000
6.3V
R7D8
47K
C7D4
0.01
R7D9 R7E0 R7E1 R7E2 R7E3 R7E4 R7E5 R7E6 R7E7 R7E8
100K
IC7D
BA6810S
OSC
CLOCK
SWITCHER
SEGMENT DRIVER
√AMP
V REG
GRID DRIVER
TO FM-2
J7D3
LEVEL METER L
GND
LEVEL METER R
C7D6
1
50V
R7F7
3300
C7D5
1
50V
R7F6
4700
R7F5
680
R7F4
47K
C7D7
4.7
50V
R7F3
47K
C7D8
4.7
50V
R7E9
1500
R7F2
22K
R7F1
3300
Q7D6
UN4111
Q7D7
UN4111
R7H3
100K
R7H4
100K
VR863
VR763
VR773
VR743
MV633
GV469
VR900
VR963
Q7D1
UN4111
D7E7
R7D2
330
D7F1
AUTO
R7D5
330
D7E8
PAL
Q7D5
UN4211
R7D4
330
D7E9
M/S
EX.VR900
Q7D3
UN4111
R7D3
330
D7F0
NTSC
VR863
VR763
VR773
VR663
GV469
VR900
VR963
D7F2 DOWN
D7F3 POWER
D7F4 REC
D7F5 FF
D7F6 ST/EJECT
S7D2 UP
S7D5 STOP
S7D8 PLAY
S7E1 REW
S7E4 TR.UP
S7D3 COLOR SEL
S7D6 EJECT
S7D9 STILL
S7E2 AUTO ON
S7E5 TR.DOWN
S7E6
S7D7
S7E0
S7E3
D7E6 D7F7 D7F8 D7F9
D7D1 D7D4 D7D7 D7E0 D7E3
D7D2 D7D5 D7D8 D7E1 D7E4
D7D3 D7D6 D7D9 D7E2 D7E5
(DIODE:1SS133)
A B C D E F
1 2 3 4 5 6 7 8

DISPLAY CONTROL PCB DRAWING PC02

"Inserted components are dependent on set type"


A
B
C
1
2
3
4
5
J7E1 344V 18PIN
18 345V 8PIN
D7H0
D7H1
7N1
7N2
7N3
7N4
R7H1
R7H2
S7F3
5
1
94V-0
CMK-54X
WA344V303-2
(PC02)
DISPLAY CONTROL SECTION
REF.NO.7F0 SERIES
S7F1
S7F4
S7F5
S7F2
3.58 4.43 PAL TV
MESECAM SECAM
NICAM OFF ON

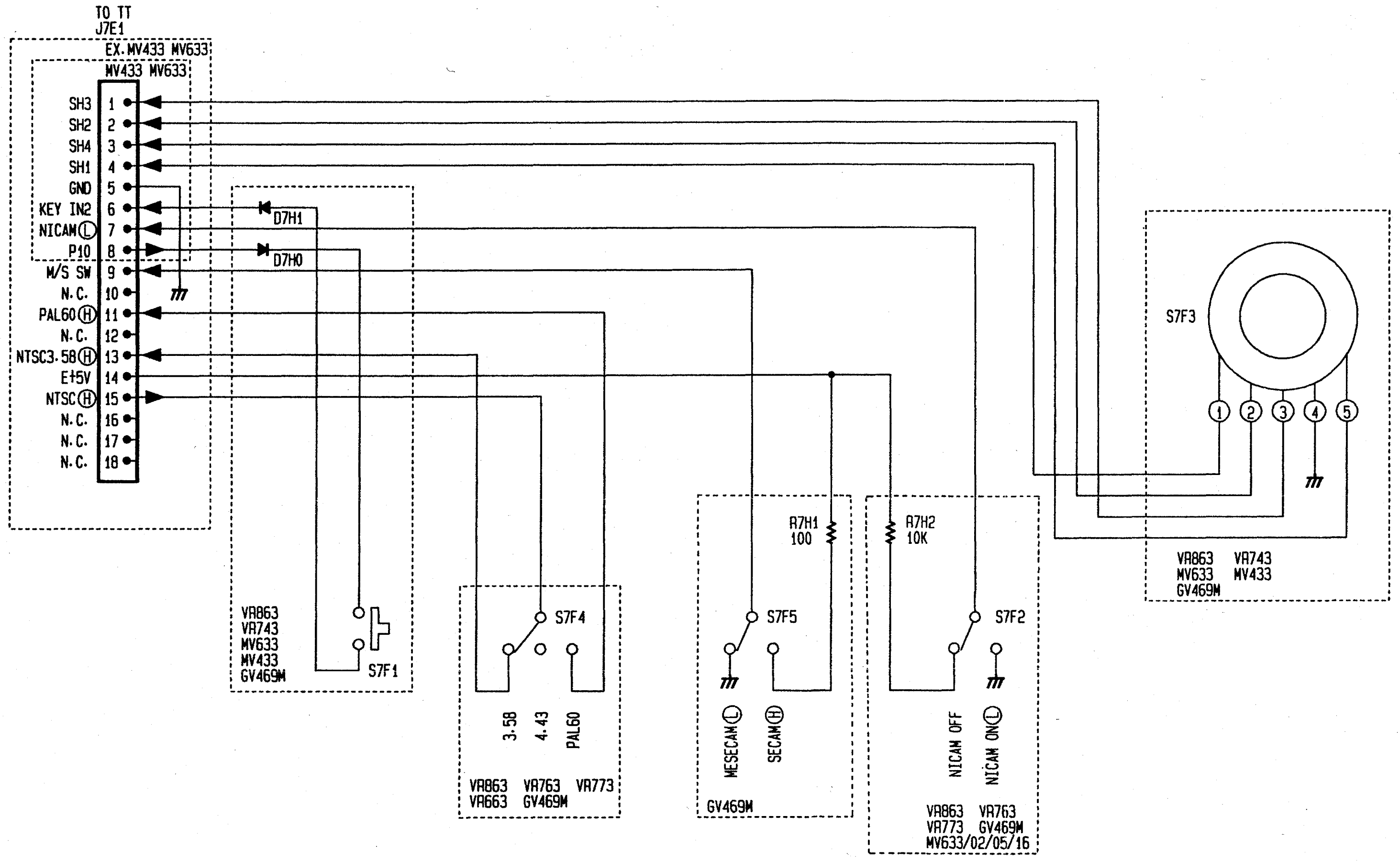
DIODES	
D7H0	B3
D7H1	B3

CONNECTOR	
J7E1	B2

RESISTORS	
R7H1	C3
R7H2	C3

SWITCHES	
S7F1	C3
S7F2	C3
S7F3	B3
S7F4	C3
S7F5	C3

DISPLAY CONTROL SCHEMATIC DIAGRAM (DC-2) PC02

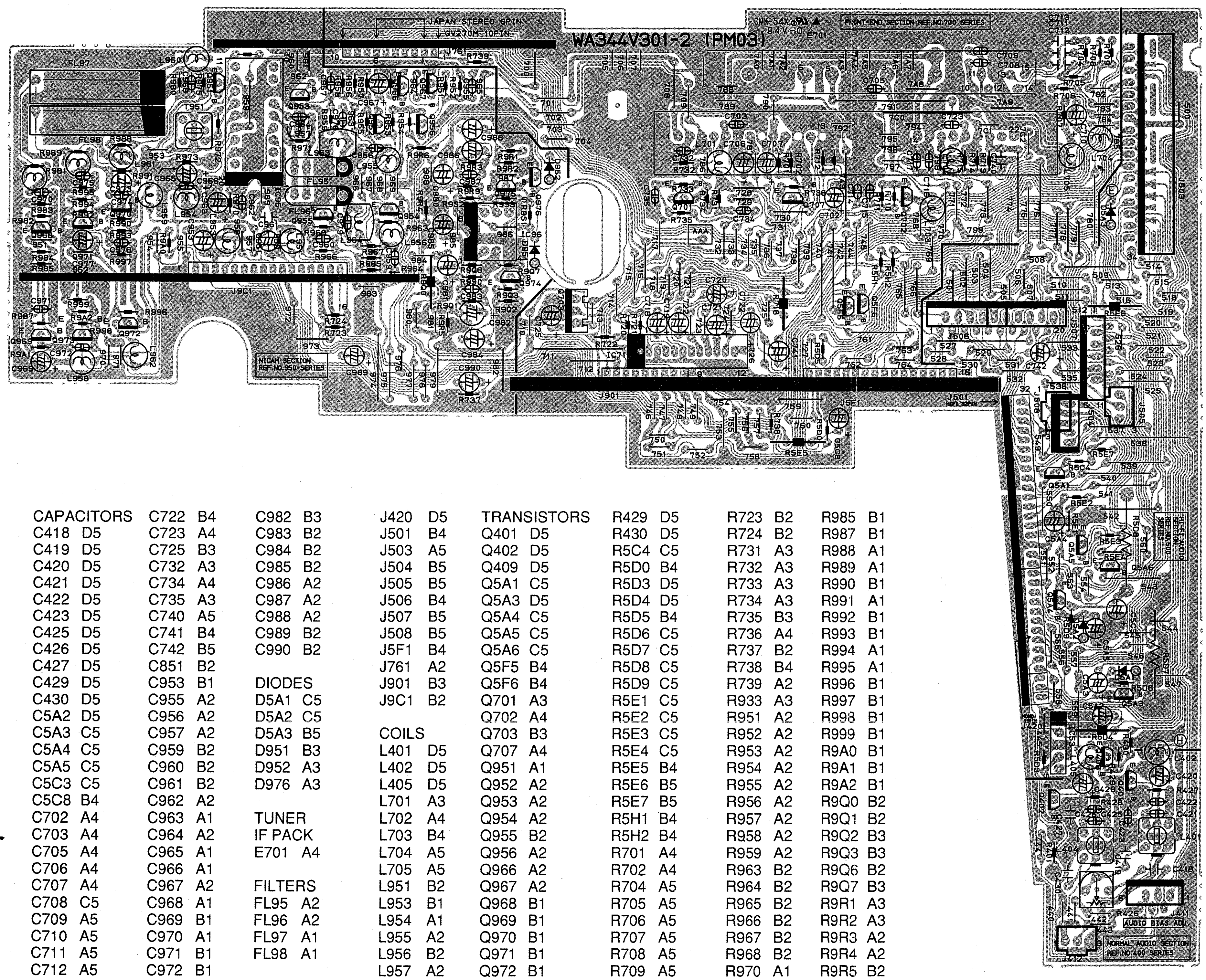

TO TT
J7E1
EX.MV433 MV633
MV433 MV633
SH3 1
SH2 2
SH4 3
SH1 4
GND 5
KEY IN2 6
NICAM Ⓛ 7
P10 8
M/S SW 9
N.C. 10
PAL60 Ⓗ 11
N.C. 12
NTSC3.58 Ⓗ 13
E+5V 14
NTSC Ⓗ 15
N.C. 16
N.C. 17
N.C. 18
D7H1
D7H0
VR863
VR743
MV633
MV433
GV469M
S7F1
S7F4
3.58
4.43
PAL60
VR863 VR763 VR773
VR663 GV469M
R7H1
100
S7F5
MESECAM Ⓛ
SECAM Ⓗ
GV469M
R7H2
10K
S7F2
NICAM OFF
NICAM ON Ⓛ
VR863 VR763
VR773 GV469M
MV633/02/05/16
S7F3
①
②
③
④
⑤
VR863 VR743
MV633 MV433
GV469M

(DIODE:1SS133)

DIODES	
D7H0	C2
D7H1	C2
CONNECTOR	
J7E1	C2
RESISTORS	
R7H1	D4
R7H2	D4
SWITCHES	
S7F1	D2
S7F2	D4
S7F3	C5
S7F4	D3
S7F5	D3

UHF/VHF TUNER/TV DEMODULATOR/HI-FI AUDIO SUB/NICAM SIF PCB DRAWING PM03

"Inserted components are dependent on set type"



CAPACITORS	
C418	D5
C419	D5
C420	D5
C421	D5
C422	D5
C423	D5
C425	D5
C426	D5
C427	D5
C429	D5
C430	D5
C5A2	D5
C5A3	C5
C5A4	C5
C5A5	C5
C5C3	C5
C5C8	B4
C702	A4
C703	A4
C705	A4
C706	A4
C707	A4
C708	C5
C709	A5
C710	A5
C711	A5
C712	A5
C713	A5
C714	A4
C715	A4
C716	A4
C717	A4
C718	B3
C719	B3
C720	B3
C721	B3
C722	B4
C723	A4
C725	B3
C732	A3
C734	A4
C735	A3
C740	A5
C741	B4
C742	B5
C851	B2
C953	B1
C955	A2
C956	A2
C957	A2
C959	B2
C960	B2
C961	B2
C962	A2
C963	A1
C964	A2
C965	A1
C966	A1
C967	A2
C968	A1
C969	B1
C970	A1
C971	B1
C972	B1
C973	A1
C974	A1
C975	A1
C976	B1
C977	B1
C978	A2
C979	B2
C980	A2
C981	B2
C982	B3
C983	B2
C984	B2
C985	B2
C986	A2
C987	A2
C988	A2
C989	B2
C990	B2

DIODES	
D5A1	C5
D5A2	C5
D5A3	B5
D951	B3
D952	A3
D976	A3

TUNER IF PACK	
E701	A4

FILTERS	
FL95	A2
FL96	A2
FL97	A1
FL98	A1

ICs	
IC53	D5
IC71	B3
IC95	A2
IC96	B3

CONNECTORS	
J411	D5
J412	E5
J420	D5
J501	B4
J503	A5
J504	B5
J505	B5
J506	B4
J507	B5
J508	B5
J5F1	B4
J761	A2
J901	B3
J9C1	B2

COILS	
L401	D5
L402	D5
L405	D5
L701	A3
L702	A4
L703	B4
L704	A5
L705	A5
L951	B2
L953	B1
L954	A1
L955	A2
L956	B2
L957	A2
L958	B1
L959	A1
L960	A1
L961	A1
L962	B1
L963	A2
L964	B2
T951	A1

TRANSISTORS	
Q401	D5
Q402	D5
Q409	D5
Q5A1	C5
Q5A3	D5
Q5A4	C5
Q5A5	C5
Q5A6	C5
Q5F5	B4
Q5F6	B4
Q701	A3
Q702	A4
Q703	B3
Q707	A4
Q951	A1
Q952	A2
Q953	A2
Q954	A2
Q955	B2
Q956	A2
Q966	A2
Q967	A2
Q968	B1
Q969	B1
Q970	B1
Q971	B1
Q972	B1
Q973	B1
Q974	B3
Q975	A3

RESISTORS	
R401	D5
R426	D5
R427	D5
R428	D5
R429	D5
R430	D5
R5C4	C5
R5D0	B4
R5D3	D5
R5D4	D5
R5D5	B4
R5D6	C5
R5D7	C5
R5D8	C5
R5D9	C5
R5E1	C5
R5E2	C5
R5E3	C5
R5E4	C5
R5E5	B4
R5E6	B5
R5E7	B5
R5H1	B4
R5H2	B4
R701	A4
R702	A4
R704	A5
R705	A5
R706	A5
R707	A5
R708	A5
R709	A5
R710	A4
R711	A4
R712	A4
R713	A5
R714	A5
R715	A5
R720	B3
R721	B3
R722	B3
R723	B2
R724	B2
R731	A3
R732	A3
R733	A3
R734	A3
R735	B3
R736	A4
R737	B2
R738	B4
R739	A2
R933	A3
R951	A2
R952	A2
R953	A2
R954	A2
R955	A2
R956	A2
R957	A2
R958	A2
R959	A2
R963	B2
R964	B2
R965	B2
R966	B2
R967	B2
R968	B2
R970	A1
R971	A2
R972	A1
R973	A1
R975	A1
R980	A1
R981	A1
R982	B1
R983	A1
R984	B1
R985	B1
R987	B1
R988	A1
R989	A1
R990	B1
R991	A1
R992	B1
R993	B1
R994	A1
R995	A1
R996	B1
R997	B1
R998	B1
R999	B1
R9A0	B1
R9A1	B1
R9A2	B1
R9Q0	B2
R9Q1	B2
R9Q2	B3
R9Q3	B3
R9Q6	B2
R9Q7	B3
R9R1	A3
R9R2	A3
R9R3	A2
R9R4	A2
R9R5	B2
R9R6	A2
R9R6	A2
R9R9	A2
R9S0	B2
R9S1	B3

PM03 (FE-1)

CAPACITORS	
C702	D3
C703	C1
C705	C5
C706	B5
C707	B5
C708	C6
C709	C6
C710	C6
C711	C6
C712	C6
C713	D2
C714	D2
C715	C6
C716	D2
C717	D3
C718	E2
C719	E2
C720	E3
C721	E3
C722	E3
C723	C3
C725	C4
C732	C1
C734	C2
C735	D2
C741	D6
C742	D7
C780	C1
C781	C1
C782	C1
C783	C1

TUNER IF PACK	
E701	A4

IC	
IC71	F2

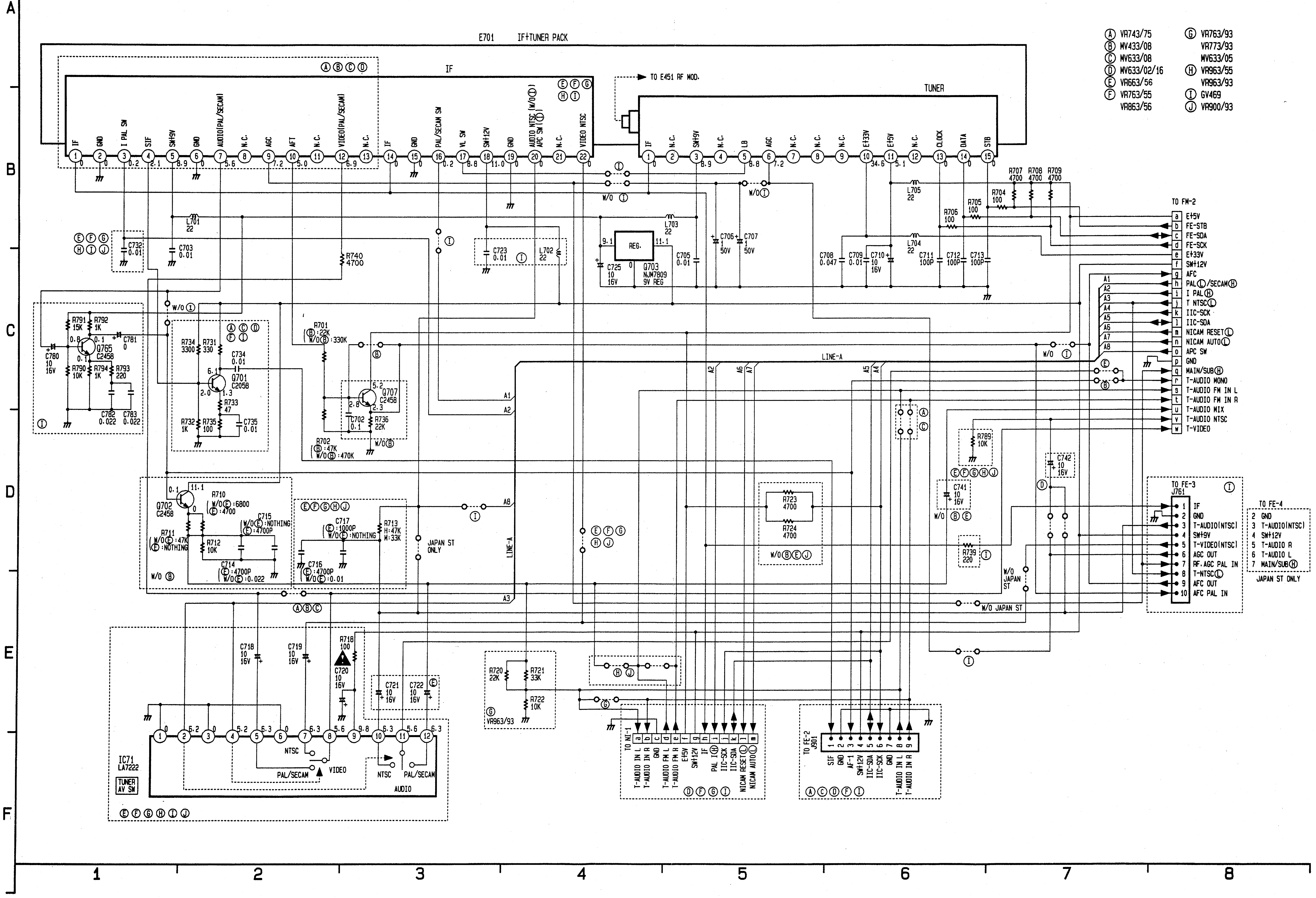
CONNECTORS	
J761	D8
J901	F6

COILS	
L701	B2
L702	C4
L703	B5
L704	B6
L705	B6

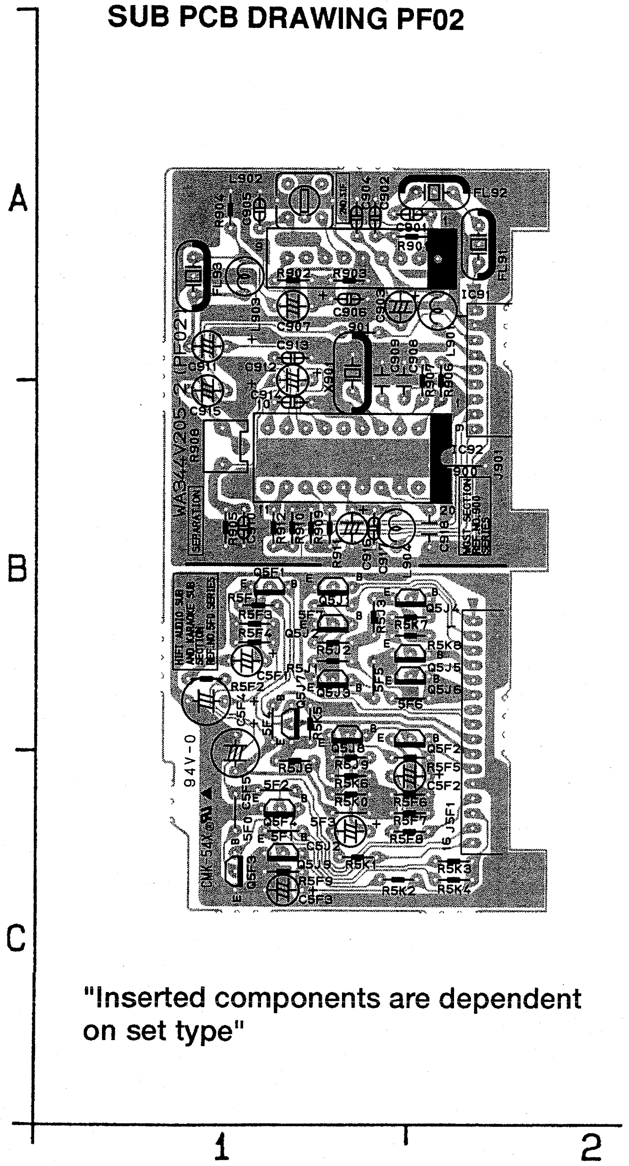
TRANSISTORS	
Q701	C2
Q702	D2
Q703	C4
Q707	C3
Q765	C1

RESISTORS	
R701	C2
R702	D2
R704	B7
R705	B6
R706	B6
R707	B7
R708	B7
R709	B7
R710	D2
R711	D2
R712	D2
R713	D3
R718	E3
R720	E4
R721	E4
R722	E4
R723	D5
R724	D5
R731	C2
R732	D2
R733	C2
R734	C2
R735	D2
R736	D3
R739	D6
R740	C3
R789	D6
R790	C1
R791	C1
R792	C1
R793	C1
R794	C1

UHF/VHF TUNER/TV DEMODULATOR SCHEMATIC DIAGRAM (FE-1) PM03


Ⓐ VR743/75
Ⓑ MV433/08
Ⓒ MV633/08
Ⓓ MV633/02/16
Ⓔ VR663/56
Ⓕ VR763/55
VR863/56
Ⓖ VR763/93
VR773/93
MV633/05
Ⓗ VR963/55
VR963/93
Ⓘ GV469
Ⓙ VR900/93
A
B
C
D
E
F
1
2
3
4
5
6
7
8
E701 IF+TUNER PACK
IF
TUNER
ⒶⒷⒸⒹ
ⒺⒻⒼ ⒽⒾ
TO E451 RF MOD.
1 IF
2 GND
3 I PAL SW
4 SIF
5 SW+9V
6 GND
7 AUDIO(PAL/SECAM)
8 N.C.
9 AGC
10 AFT
11 N.C.
12 VIDEO(PAL/SECAM)
13 N.C.
14 IF
15 GND
16 PAL/SECAM SW
17 VL SW
18 SW+12V
19 GND
20 AUDIO NTSC (W/OⒾ) APC SW (Ⓘ)
21 N.C.
22 VIDEO NTSC
1 IF
2 N.C.
3 SW+9V
4 N.C.
5 LB
6 AGC
7 N.C.
8 N.C.
9 N.C.
10 E+33V
11 E+5V
12 N.C.
13 CLOCK
14 DATA
15 STB
W/O Ⓘ
L701 22
L703 22
L702 22
L704 22
L705 22
C732 0.01
C703 0.01
C723 0.01
R740 4700
REG.
Q703 NJM7809 9V REG
C725 10 16V
C705 0.01
C706 1 50V
C707 1 50V
C708 0.047
C709 0.01
C710 10 16V
C711 100P
C712 100P
C713 100P
R704 100
R705 100
R706 100
R707 4700
R708 4700
R709 4700
R791 15K
R792 1K
C781 0
C780 10 16V
Q765 C2458
R790 10K
R794 1K
R793 220
C782 0.022
C783 0.022
R734 3300
R731 330
C734 0.01
Q701 C2058
R733 47
R732 1K
R735 100
C735 0.01
R701 (Ⓑ:22K W/OⒷ:330K)
Q707 C2458
C702 0.1
R736 22K
R702 (Ⓑ:47K W/OⒷ:470K)
W/OⒷ
LINE-A
A1
A2
A3
A4
A5
A6
A7
A8
Q702 C2458
R710 (W/OⒺ:6800 Ⓔ:4700)
R711 (W/OⒺ:47K Ⓔ:NOTHING)
R712 10K
C715 (W/OⒺ:NOTHING Ⓔ:4700P)
C714 (Ⓔ:4700P W/OⒺ:0.022)
ⒺⒻⒼⒽⒿ
C717 (Ⓔ:1000P W/OⒺ:NOTHING)
R713 H:47K W:33K
C716 (Ⓔ:4700P W/OⒺ:0.01)
W/O Ⓑ
JAPAN ST ONLY
ⒺⒻⒼ ⒽⒿ
R723 4700
R724 4700
W/OⒷⒺⒿ
R789 10K
ⒺⒻⒼⒽⒿ
C741 10 16V
W/O ⒷⒺ
C742 10 16V
R739 220
W/O JAPAN ST
C718 10 16V
C719 10 16V
R718 100
C720 10 16V
C721 10 16V
C722 10 16V
R720 22K
R721 33K
R722 10K
Ⓖ VR963/93
IC71 LA7222
TUNER AV SW
NTSC
PAL/SECAM
VIDEO
AUDIO
ⒺⒻⒼⒽⒾⒿ
TO FM-2
a E+5V
b FE-STB
c FE-SDA
d FE-SCK
e E+33V
f SW+12V
g AFC
h PAL Ⓛ/SECAMⒽ
i I PAL Ⓗ
j T NTSCⓁ
k IIC-SCK
l IIC-SDA
m NICAM RESETⓁ
n NICAM AUTOⓁ
o APC SW
p GND
q MAIN/SUBⒽ
r T-AUDIO MONO
s T-AUDIO FM IN L
t T-AUDIO FM IN R
u T-AUDIO MIX
v T-AUDIO NTSC
w T-VIDEO
TO FE-3 J761 Ⓘ
1 IF
2 GND
3 T-AUDIO(NTSC)
4 SW+9V
5 T-VIDEO(NTSC)
6 AGC OUT
7 RF.AGC PAL IN
8 T-NTSCⓁ
9 AFC OUT
10 AFC PAL IN
TO FE-4
2 GND
3 T-AUDIO(NTSC)
4 SW+12V
5 T-AUDIO R
6 T-AUDIO L
7 MAIN/SUBⒽ
JAPAN ST ONLY
TO NI-1
a T-AUDIO IN L
b T-AUDIO IN R
c GND
d T-AUDIO FM L
e T-AUDIO FM H
f E+5V
g SW+12V
h IF
i PAL IⒽ
j IIC-SCK
k IIC-SDA
l NICAM RESETⓁ
m NICAM AUTOⓁ
ⒹⒻⒼⒾ
TO FE-2 J901
1 SIF
2 GND
3 AF-1
4 SW+12V
5 IIC-SDA
6 IIC-SCK
7 GND
8 T-AUDIO IN L
9 T-AUDIO IN R
ⒶⒸⒹⒻⒾ

2ND. SIF/2 CARRIER ST/HI-FI AUDIO SUB PCB DRAWING PF02



"Inserted components are dependent on set type"

CAPACITORS	
C5F1	B1
C5F2	C2
C5F3	C1
C5F4	B1
C5F5	C1
C5J2	C1
C901	A1
C902	A1
C903	A1
C904	A1
C905	A1
C906	A1
C907	A1
C908	A1
C909	A1
C910	B1
C911	A1
C912	B1
C913	A1
C914	B1
C915	B1
C916	B1
C917	B1
C918	B2

FILTERS	
FL91	A2
FL92	A2
FL93	A1

ICs	
IC91	A2
IC92	B2

CONNECTORS	
J5F1	C2
J901	B2

COILS	
L901	A2
L902	A1
L903	A1
L904	B1

TRANSISTORS	
Q5F1	B1
Q5F2	B2
Q5F3	C1
Q5F4	C1
Q5J1	B1
Q5J2	B1
Q5J3	B1
Q5J4	B2
Q5J5	B2
Q5J6	B2
Q5J7	B1
Q5J8	B1
Q5J9	C1

RESISTORS	
R5F1	B1
R5F2	B1
R5F3	B1
R5F4	B1
R5F5	C2
R5F6	C2
R5F7	C2
R5F8	C2
R5F9	C1
R5J1	B1
R5J2	B1
R5J3	B1
R5J6	C1
R5J9	C1
R5K0	C1
R5K1	C1
R5K2	C1
R5K3	C2
R5K4	C2
R5K5	B1
R5K6	C1
R5K7	B1
R5K8	B2
R901	A1
R902	A1
R903	A1
R904	A1
R905	B1
R906	B2
R907	B2
R908	B1
R909	B1
R910	B1
R911	B1
R912	B1

X'TALS	
X901	A1
X912	A1

2nd. SIF/2CARRIER ST SCHEMATIC DIAGRAM (FE-2)

PF02

VR743
MV633/02/08/16
VR763/55
VR863
GV469

CAPACITORS	
C901	D1
C902	D1
C903	E1
C904	E1
C905	E2
C906	E2
C907	D2
C908	E3
C909	E3
C910	E4
C911	D4
C912	D4
C913	D4
C914	D4
C915	D5
C916	C4
C917	C4
C918	C3

FILTERS	
FL91	D1
FL92	D1
FL93	E3

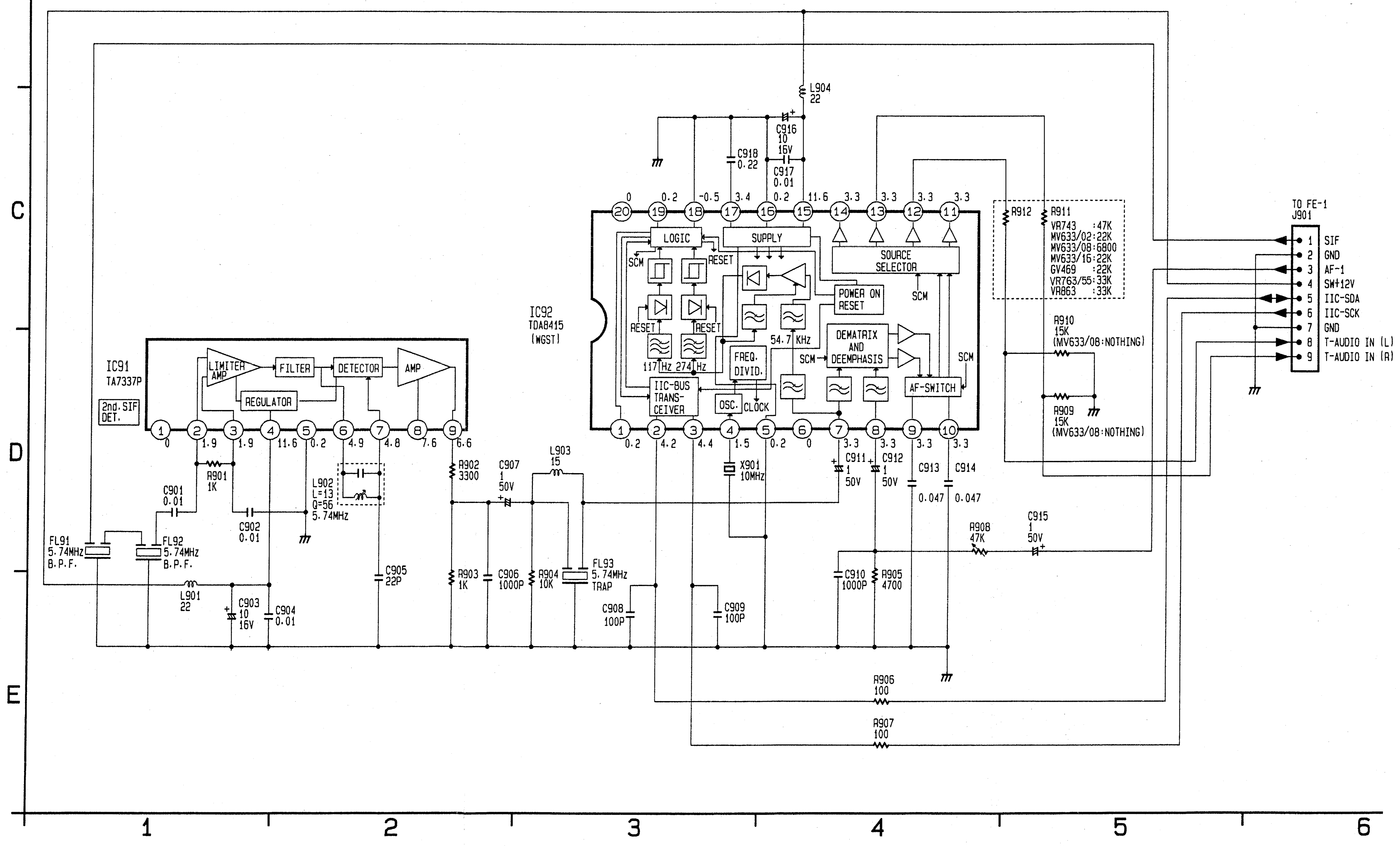
ICs	
IC91	D2
IC92	C3

CONNECTOR	
J901	C6

COILS	
L901	E1
L902	D2
L903	D3
L904	C4

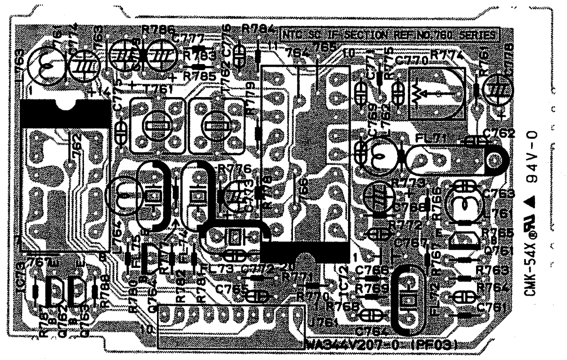
RESISTORS	
R901	D1
R902	D2
R903	E2
R904	E3
R905	E4
R906	E4
R907	E4
R908	D4
R909	D5
R910	D5
R911	C5
R912	C5

X'TAL	
X901	D3


A
B
C
D
E
1
2
3
4
5
6
IC91
TA7337P
2nd. SIF DET.
LIMITER AMP
FILTER
DETECTOR
AMP
REGULATOR
FL91 5.74MHz B.P.F.
FL92 5.74MHz B.P.F.
L901 22
C901 0.01
R901 1K
C902 0.01
C903 10 16V
C904 0.01
L902 L=13 Q=56 5.74MHz
C905 22P
R902 3300
R903 1K
C906 1000P
R904 10K
C907 1 50V
L903 15
FL93 5.74MHz TRAP
C908 100P
C909 100P
IC92
TDA8415
(WGST)
LOGIC
SUPPLY
SOURCE SELECTOR
POWER ON RESET
SCM
RESET
117Hz
274Hz
54.7 KHz
FREQ. DIVID.
IIC-BUS TRANS-CEIVER
OSC.
CLOCK
DEMATRIX AND DEEMPHASIS
AF-SWITCH
L904 22
C916 10 16V
C917 0.01
C918 0.22
X901 10MHz
C911 1 50V
C912 1 50V
C913 0.047
C914 0.047
C910 1000P
R905 4700
R906 100
R907 100
R908 47K
C915 1 50V
R912
R911
VR743 :47K
MV633/02:22K
MV633/08:6800
MV633/16:22K
GV469 :22K
VR763/55:33K
VR863 :33K
R910 15K (MV633/08:NOTHING)
R909 15K (MV633/08:NOTHING)
TO FE-1
J901
1 SIF
2 GND
3 AF-1
4 SW+12V
5 IIC-SDA
6 IIC-SCK
7 GND
8 T-AUDIO IN (L)
9 T-AUDIO IN (R)

NTSC IF PCB DRAWING PF03

"Inserted components are dependent on set type"



A
B
C
1
2
NTSC SC IF SECTION REF NO 760 SERIES
CMK-54X 94V-0
NA344V207-0 (PF03)

CAPACITORS	
C761	B2
C762	B2
C763	B2
C764	B2
C765	B1
C766	B2
C767	B2
C768	B2
C769	B2
C770	B2
C771	B2
C772	B1
C773	B1
C774	B1
C775	B1
C776	B1
C777	B1
C778	B2
C779	B1

FILTERS	
FL71	B2
FL72	B2
FL73	B1
FL74	B1
FL75	B1

ICs	
IC72	B1
IC73	B1

CONNECTOR	
J761	B1

COILS	
L761	B2
L762	B2
L763	B2
L764	B1
T761	B1
T762	B1

TRANSISTORS	
Q761	B2
Q762	B1
Q763	B1
Q764	B1

RESISTORS	
R761	B2
R763	B2
R764	B2
R765	B2
R766	B2
R767	B2
R768	B2
R769	B2
R770	B1
R771	B1
R772	B2
R773	B2
R774	B2
R775	B2
R776	B1
R777	B1
R778	B1
R779	B1
R780	B1
R781	B1
R782	B1
R783	B1
R784	B1
R785	B1
R786	B1
R787	B1
R788	B1

NTSC IF SCHEMATIC DIAGRAM (FE-3) PF03

CAPACITORS	
C761	E3
C762	E3
C763	E3
C764	E4
C765	E4
C766	E4
C767	E5
C768	E5
C769	E5
C770	E5
C771	E5
C772	C4
C773	C4
C774	B4
C775	C5
C776	C6
C777	B6
C778	E6
C779	C2

FILTERS	
FL71	E3
FL72	E4
FL73	B4
FL74	B4
FL75	B5

ICs	
IC72	D4
IC73	C2

CONNECTOR	
J761	C1

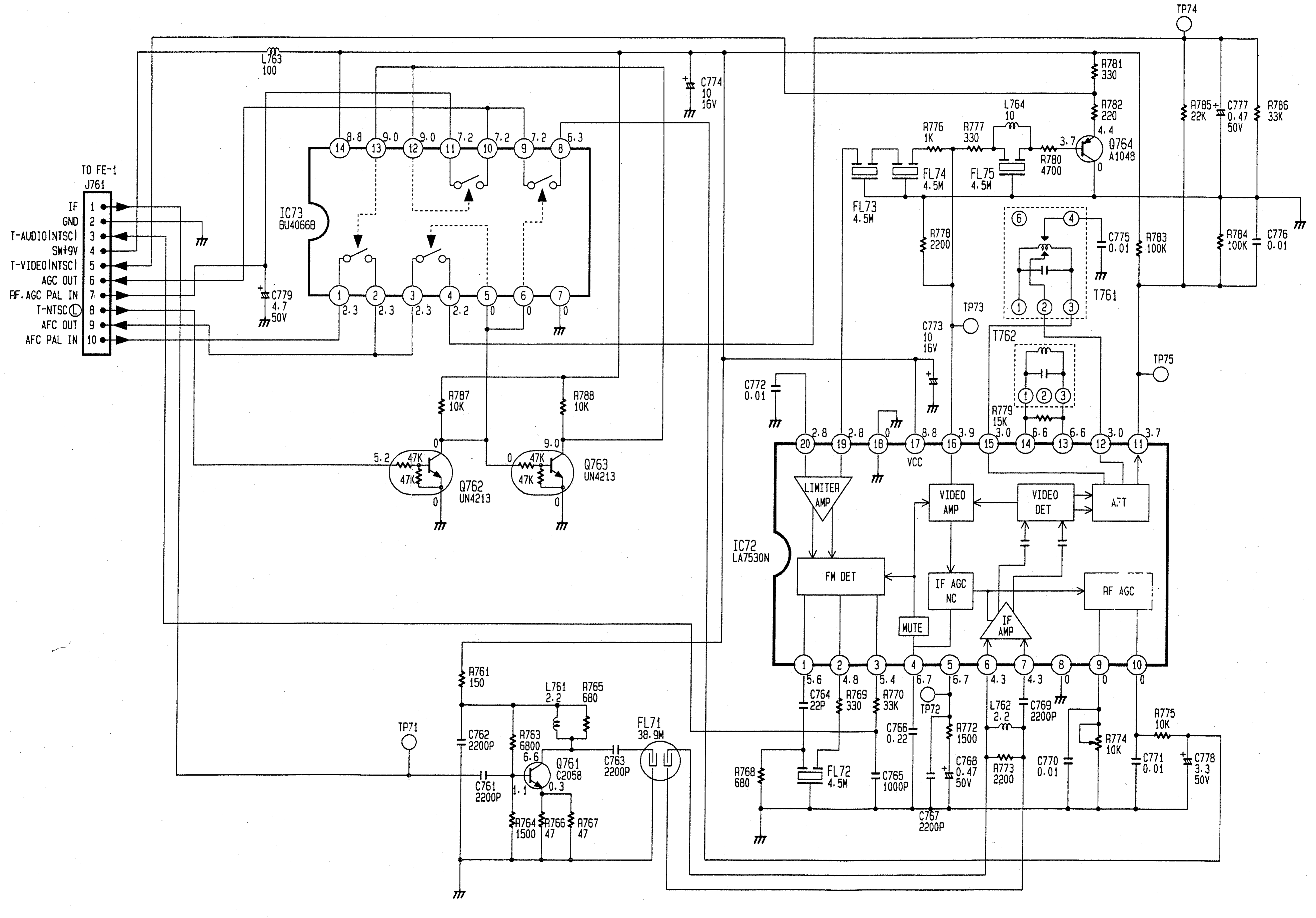
COILS	
L761	E3
L762	E5
L763	B2
L764	B5
T761	C5
T762	C5

TRANSISTORS	
Q761	E3
Q762	D2
Q763	D3
Q764	B5

RESISTORS	
R761	D3
R763	E3
R764	E3
R765	E3
R766	E3
R767	E3
R768	E4
R769	E4
R770	E4
R772	E5
R773	E5
R774	E5
R775	E6
R776	B4
R777	B5
R778	C4
R779	C5
R780	B5
R781	B5
R782	B5
R783	C5
R784	B6
R785	B6
R786	B6
R787	C3
R788	C3

TEST POINTS	
TP71	E2
TP72	E4
TP73	C5
TP74	B6
TP75	C5

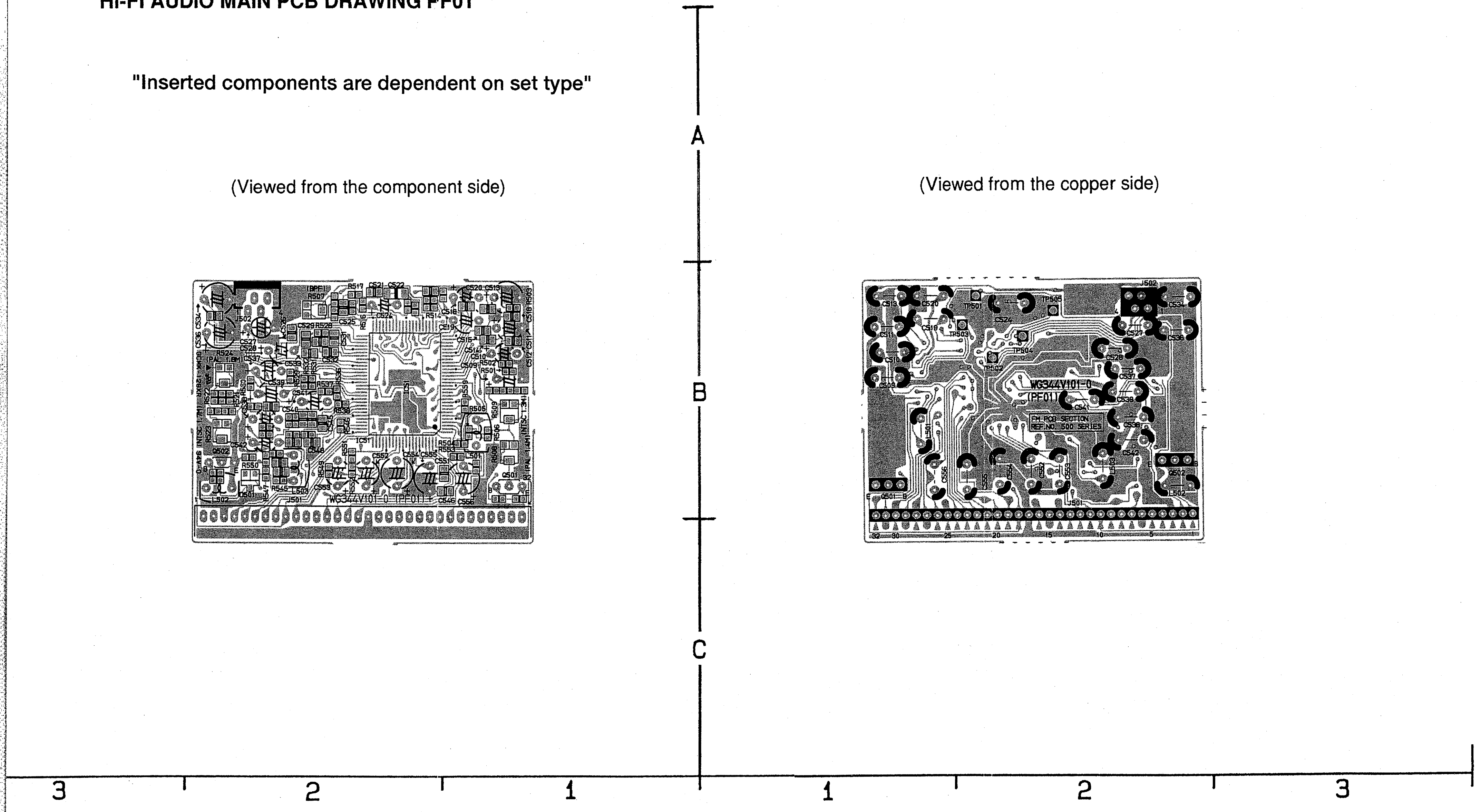
GV469M



A
B
C
D
E
1
2
3
4
5
6
TO FE-1
J761
IF 1
GND 2
T-AUDIO(NTSC) 3
SW+9V 4
T-VIDEO(NTSC) 5
AGC OUT 6
RF.AGC PAL IN 7
T-NTSC 8
AFC OUT 9
AFC PAL IN 10
L763 100
C774 10 16V
C779 4.7 50V
IC73 BU4066B
IC72 LA7530N
Q762 UN4213
Q763 UN4213
R787 10K
R788 10K
47K
47K
Q761 C2058
Q764 A1048
R761 150
L761 2.2
R765 680
C762 2200P
R763 6800
C761 2200P
C763 2200P
R764 1500
R766 47
R767 47
FL71 38.9M
TP71
R768 680
C764 22P
R769 330
R770 33K
FL72 4.5M
C765 1000P
C766 0.22
TP72
R772 1500
C768 0.47 50V
C767 2200P
L762 2.2
C769 2200P
R773 2200
C770 0.01
R774 10K
C771 0.01
R775 10K
C778 3.3 50V
C772 0.01
C773 10 16V
TP73
T762
R779 15K
T761
C775 0.01
R783 100K
R784 100K
C776 0.01
TP75
TP74
R785 22K
C777 0.47 50V
R786 33K
R781 330
R782 220
R776 1K
R777 330
L764 10
R780 4700
FL74 4.5M
FL75 4.5M
FL73 4.5M
R778 2200
LIMITER AMP
FM DET
VIDEO AMP
VIDEO DET
AFT
IF AGC NC
MUTE
IF AMP
RF AGC
VCC

HI-FI AUDIO MAIN PCB DRAWING PF01

"Inserted components are dependent on set type"



(Viewed from the component side)

(Viewed from the copper side)

PF01 (FM-1)

CAPACITORS	
C509	F5
C510	F5
C511	F6
C512	F6
C513	F6
C514	F6
C515	F6
C516	F7
C517	F7
C518	F7
C519	F7
C520	F7
C521	E8
C522	E8
C523	D8
C524	C8
C525	C8
C526	C8
C527	B7
C528	B7
C529	B7
C530	B7
C531	B7
C532	B7
C533	B6
C534	B6
C535	B6
C536	B6
C537	B5
C538	B5
C539	B5
C540	A4
C541	B4
C542	B4
C543	B4
C544	B4
C545	B4
C546	E2
C547	B4
C548	B4
C549	B3
C551	E2
C552	D2
C553	C2
C554	D2
C555	D2
C556	E2
C559	B3
DIODE	
D501	C2
IC	
IC51	B2
CONNECTORS	
J501	E1
J502	D8
COILS	
L501	F7
L502	B7
L503	B3
TRANSISTORS	
Q501	F8
Q502	B7
RESISTORS	
R501	F5
R502	F5
R503	F7
R504	F7
R505	F7
R506	F8
R507	D8
R508	F8
R509	F7
R510	F8
R511	F8
R512	D7
R513	D8
R514	E8
R515	D8
R516	C8
R517	C8
R518	C8
R519	C8
R520	B7
R521	B7
R522	B7
R523	B7
R524	B7
R525	D8
R526	B8
R527	B8
R528	B7
R529	B5
R530	B5
R531	B5
R532	B5
R533	A4
R534	B4
R535	B4
R536	B4
R537	B4
R538	B4
R539	A4
R540	A4
R541	B4
R542	B4
R543	B3
R545	B3
R546	B3
R547	B3
R548	B3
R549	B2
R550	B2
R551	C2
R552	C2
R553	E3
R554	E3
R555	D8
R556	F7
R557	F7
R558	F7
R559	F4
TEST POINTS	
TP501	E8
TP502	D8
TP503	E8
TP504	C7
TP505	C8

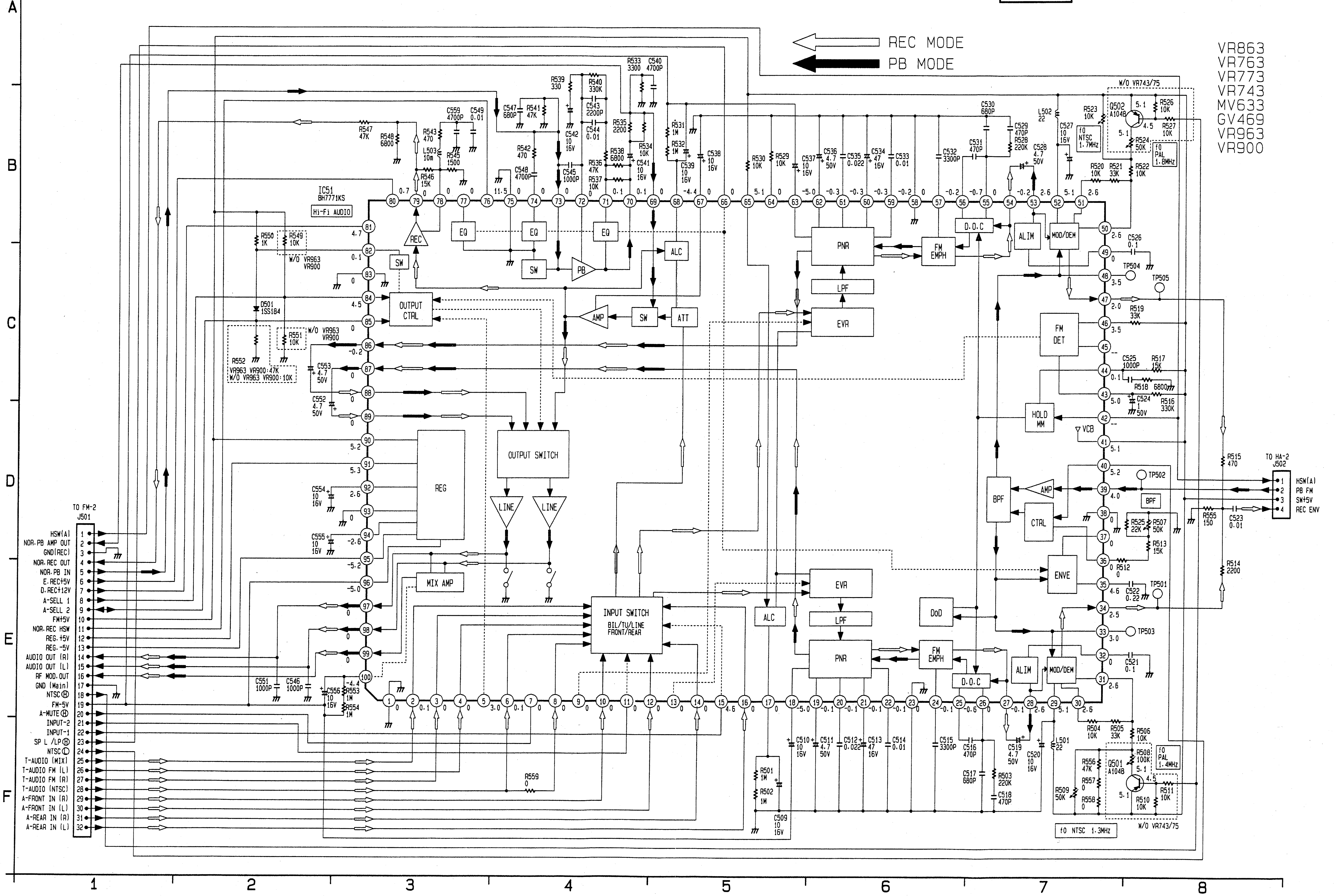
(Viewed from the component side)

CAPACITORS	
C509	B1
C510	B1
C511	B1
C512	B1
C513	B1
C514	B1
C515	B1
C516	B1
C518	B1
C519	B1
C520	B1
C521	B2
C522	B2
C524	B2
C525	B2
C526	B2
C527	B2
C528	B2
C529	B2
C531	B2
C532	B2
C533	B2
C534	B2
C536	B2
C537	B2
C538	B2
C539	B2
C540	B2
C541	B2
C542	B2
C545	B2
C546	B2
C548	B2
C551	B2
C552	B2
C553	B2
C554	B2
C555	B2
C556	B1
DIODE	
D501	B2
IC	
IC51	B2
CONNECTORS	
J501	B2
J502	B2
COILS	
L501	B1
L502	B2
L503	B2
TRANSISTORS	
Q501	B1
Q502	B2
RESISTORS	
R501	B1
R502	B1
R503	B1
R504	B1
R505	B1
R506	B1
R507	B2
R508	B1
R509	B1
R514	B2
R516	B2
R517	B2
R521	B2
R522	B2
R523	B2
R524	B2
R528	B2
R529	B2
R530	B2
R531	B2
R532	B2
R536	B2
R537	B2
R538	B2
R545	B2
R546	B2
R547	B2
R549	B2
R550	B2
R551	B2
R552	B2
R553	B1
R559	B1

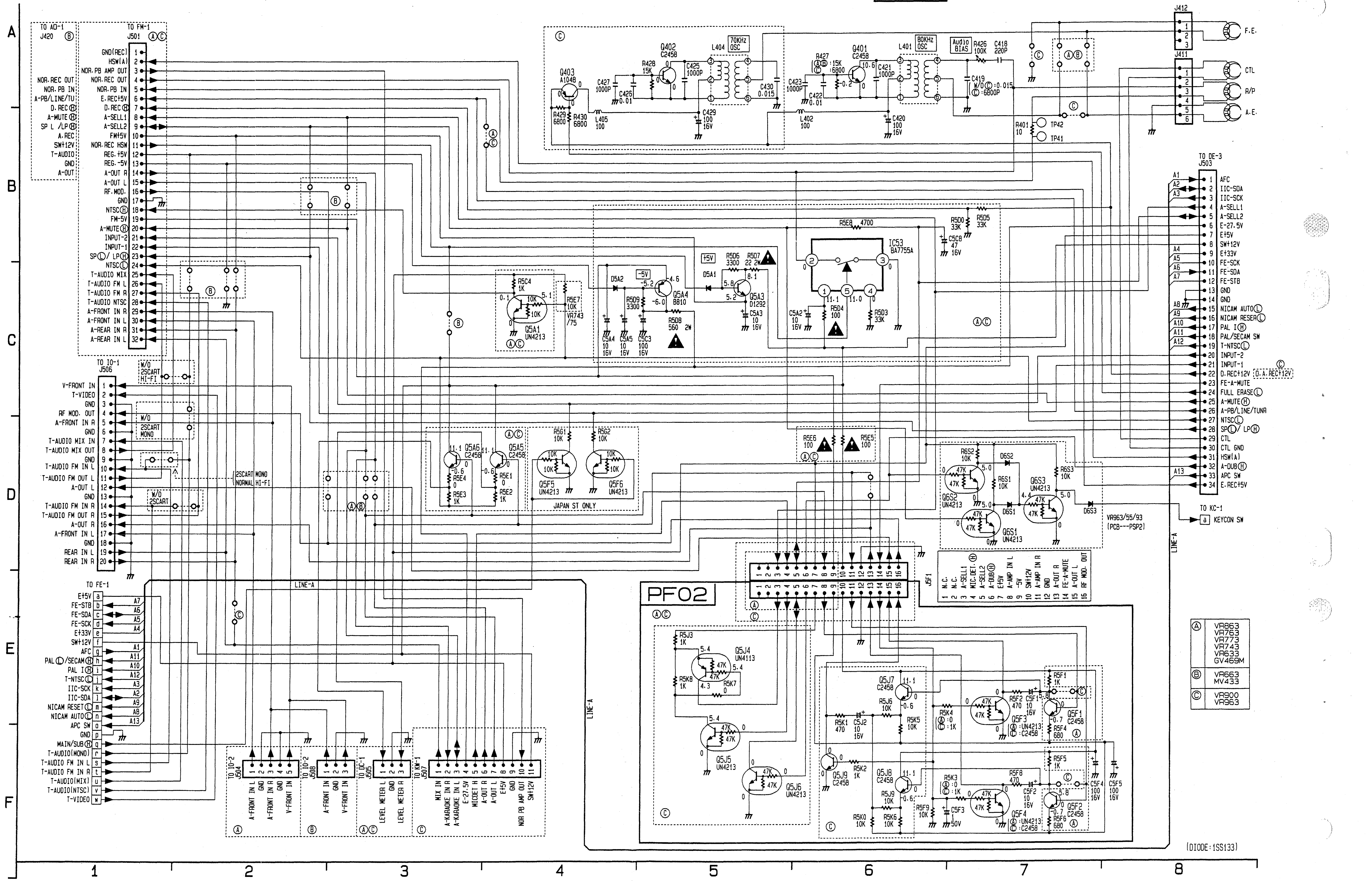
(Viewed from the copper side)

CAPACITORS	
C509	B1
C510	B1
C511	B1
C513	B1
C519	B1
C520	B1
C524	B2
C527	B2
C528	B2
C534	B2
C536	B2
C537	B2
C538	B2
C539	B2
C541	B2
C542	B2
C552	B2
C553	B2
C554	B2
C555	B2
C556	B1
CONNECTORS	
J501	B2
J502	B2
COILS	
L501	B1
L502	B2
L503	B2
TRANSISTORS	
Q501	B1
Q502	B2
TEST POINTS	
TP501	B2
TP502	B2
TP503	B2
TP504	B2
TP505	B2

HI-FI AUDIO MAIN SCHEMATIC DIAGRAM (FM-1) PF01


REC MODE
PB MODE
VR863
VR763
VR773
VR743
MV633
GV469
VR963
VR900
IC51
BH7771KS
Hi-Fi AUDIO
TO FM-2
J501
1 HSW(A)
2 NOR.PB AMP OUT
3 GND(REC)
4 NOR.REC OUT
5 NOR.PB IN
6 E.REC+5V
7 D.REC+12V
8 A-SELL 1
9 A-SELL 2
10 FM+5V
11 NOR.REC HSW
12 REG.+5V
13 REG.-5V
14 AUDIO OUT (R)
15 AUDIO OUT (L)
16 RF MOD.OUT
17 GND (Main)
18 NTSC⊕
19 FM-5V
20 A-MUTE⊕
21 INPUT-2
22 INPUT-1
23 SP L /LP⊕
24 NTSC⊖
25 T-AUDIO (MIX)
26 T-AUDIO FM (L)
27 T-AUDIO FM (R)
28 T-AUDIO (NTSC)
29 A-FRONT IN (R)
30 A-FRONT IN (L)
31 A-REAR IN (R)
32 A-REAR IN (L)
TO HA-2
J502
1 HSW(A)
2 PB FM
3 SW+5V
4 REC ENV
REC
SW
EQ
PB
ALC
ATT
AMP
OUTPUT CTRL
OUTPUT SWITCH
LINE
REG
MIX AMP
INPUT SWITCH
BIL/TU/LINE
FRONT/REAR
PNR
LPF
EVR
FM EMPH
D.O.C
ALIM
MOD/DEM
FM DET
HOLD MM
BPF
CTRL
ENVE
DoD
VCB
W/O VR963 VR900
W/O VR743/75
R552
VR963 VR900:47K
W/O VR963 VR900:10K
D501
1SS184
Q502
A1048
Q501
A1048
f0 NTSC 1.7MHz
f0 PAL 1.8MHz
f0 PAL 1.4MHz
f0 NTSC 1.3MHz
TP501
TP502
TP503
TP504
TP505
A
B
C
D
E
F
1
2
3
4
5
6
7
8

HI-FI AUDIO SUB SCHEMATIC DIAGRAM (FM-2) PM03


TO AD-1 J420 Ⓑ
TO FM-1 J501 ⒶⒸ
GND(REC)
HSW(A)
NOR. PB AMP OUT
NOR. REC OUT
NOR. PB IN
E. REC+5V
D. REC Ⓗ
A-SELL1
A-SELL2
FM+5V
NOR. REC HSW
REG. +5V
REG. -5V
A-OUT R
A-OUT L
RF. MOD.
GND
NTSC Ⓗ
FM-5V
A-MUTE Ⓗ
INPUT-2
INPUT-1
SP Ⓛ/ LP Ⓗ
NTSC Ⓛ
T-AUDIO MIX
T-AUDIO FM L
T-AUDIO FM R
T-AUDIO NTSC
A-FRONT IN R
A-FRONT IN L
A-REAR IN R
A-REAR IN L
NOR. REC OUT
NOR. PB IN
A-PB/LINE/TU
D. REC Ⓗ
A-MUTE Ⓗ
SP L /LP Ⓗ
A. REC
SW+12V
T-AUDIO
GND
A-OUT
TO IO-1 J506
V-FRONT IN
T-VIDEO
GND
RF MOD. OUT
A-FRONT IN R
GND
T-AUDIO MIX IN
T-AUDIO MIX OUT
GND
T-AUDIO FM IN L
T-AUDIO FM OUT L
A-OUT L
GND
T-AUDIO FM IN R
T-AUDIO FM OUT R
A-OUT R
A-FRONT IN L
GND
REAR IN L
REAR IN R
W/O 2SCART HI-FI
W/O 2SCART MONO
W/O 2SCART
2SCART MONO NORMAL HI-FI
TO FE-1
E+5V
FE-STB
FE-SDA
FE-SCK
E+33V
SW+12V
AFC
PAL Ⓛ/SECAM Ⓗ
PAL I Ⓗ
T-NTSC Ⓛ
IIC-SCK
IIC-SDA
NICAM RESET Ⓛ
NICAM AUTO Ⓛ
APC SW
GND
MAIN/SUB Ⓗ
T-AUDIO(MONO)
T-AUDIO FM IN L
T-AUDIO FM IN R
T-AUDIO(MIX)
T-AUDIO(NTSC)
T-VIDEO
LINE-A
TO IO-2 J504
A-FRONT IN L
GND
A-FRONT IN R
GND
V-FRONT IN
TO IO-2 J508
TO DC-1 J505
LEVEL METER L
GND
LEVEL METER R
TO KM-1 J507
MIX IN
A-KARAOKE IN R
A-KARAOKE IN L
E-27.5V
MICDET H
A-OUT R
A-OUT L
E+5V
GND
NOR PB AMP OUT
SW+12V
Q403 A1048
Q402 C2458
L404 70KHz OSC
R428 15K
C425 1000P
C427 1000P
C426 0.01
C430 0.015
R429 6800
R430 6800
L405 100
C429 100 16V
Q401 C2458
L401 80KHz OSC
R427 ⒶⒷ:15K Ⓒ:6800
C421 1000P
C423 1000P
C422 0.01
L402 100
C420 100 16V
Audio BIAS
R426 100K
C418 220P
C419 W/O Ⓒ:0.015 Ⓒ:6800P
R401 10
TP42
TP41
J412
F.E.
J411
CTL
R/P
A.E.
TO DE-3 J503
AFC
IIC-SDA
IIC-SCK
A-SELL1
A-SELL2
E-27.5V
E+5V
SW+12V
E+33V
FE-SCK
FE-SDA
FE-STB
GND
GND
NICAM AUTO Ⓛ
NICAM RESET Ⓛ
PAL I Ⓗ
PAL/SECAM SW
T-NTSC Ⓛ
INPUT-2
INPUT-1
D. REC+12V Ⓒ D. A. REC+12V
FE-A-MUTE
FULL ERASE Ⓛ
A-MUTE Ⓗ
A-PB/LINE/TUNR
NTSC Ⓛ
SP Ⓛ/ LP Ⓗ
CTL
CTL GND
HSW(A)
A-DUB Ⓗ
APC SW
E. REC+5V
TO KC-1
KEYCON SW
R5E8 4700
R500 33K
R505 33K
C5C8 47 16V
IC53 BA7755A
R506 3300
R507 22 2W
D5A2
D5A1
Q5A4 B810
Q5A3 D1292
R509 3300
R508 560 2W
C5A3 10 16V
C5A2 10 16V
R504 100
R503 33K
C5A4 10 16V
C5A5 10 16V
C5C3 100 16V
R5C4 1K
R5E7 10K VR743 /75
Q5A1 UN4213
Q5A6 C2458
Q5A5 C2458
R5E4 0
R5E3 1K
R5E1 0
R5E2 1K
R5G1 10K
R5G2 10K
Q5F5 UN4213
Q5F6 UN4213
JAPAN ST ONLY
R5E6 100
R5E5 100
R6S2 10K
D6S2
R6S1 10K
R6S3 10K
Q6S2 UN4213
Q6S3 UN4213
D6S1
D6S3
Q6S1 UN4213
VR963/55/93 (PCB---PSP2)
J5F1
N.C.
N.C.
A-SELL1
MIC. DET. Ⓗ
A-SELL2
A-DUB Ⓗ
E+5V
A-AMP IN L
-5V
SW+12V
A-AMP IN R
GND
A-OUT R
FE-A-MUTE
A-OUT L
RF MOD. OUT
PF02
R5J3 1K
Q5J4 UN4113
R5K8 1K
R5K7 0
Q5J5 UN4213
Q5J6 UN4213
Q5J7 C2458
R5J6 10K
R5K5 10K
R5K1 470
C5J2 10 16V
R5K4 Ⓐ:0 Ⓒ:1K
R5F2 470
C5F1 10 16V
Q5F3 Ⓐ:UN4213 Ⓒ:C2458
R5F1 1K
Q5F1 C2458
R5F4 680
Q5J9 C2458
R5K2 1K
Q5J8 C2458
R5J9 10K
R5K0 10K
R5K6 10K
R5F9 10K
R5K3 Ⓐ:0 Ⓒ:1K
C5F3 1 50V
R5F8 470
C5F2 10 16V
Q5F4 Ⓐ:UN4213 Ⓒ:C2458
R5F5 1K
Q5F2 C2458
R5F6 680
C5F4 100 16V
C5F5 100 16V
Ⓐ VR863 VR763 VR773 VR743 VR633 GV469M
Ⓑ VR663 MV433
Ⓒ VR900 VR963
(DIODE: 1SS133)
A
B
C
D
E
F
1
2
3
4
5
6
7
8

PM03 (FM-2)

CAPACITORS

C418	A7
C419	A7
C420	B6
C421	A6
C422	A6
C423	A6
C425	A5
C426	A4
C427	A4
C429	B5
C430	A5
C5A2	C6
C5A3	C5
C5A4	C4
C5A5	C4
C5C3	C5
C5C8	B6
C5F1	E7
C5F2	F7
C5F3	F7
C5F5	F8
C5J2	E6

DIODES

D5A1	C5
D5A2	C4
D6S1	D7
D6S2	D7
D6S3	D7

IC

IC53	B6

CONNECTORS

J412	A8
J420	A1
J501	A1
J503	B8
J504	F2
J505	F3
J506	D1
J507	F3
J508	F3

COILS

L401	A6
L402	B6
L404	A5
L405	B4

TRANSISTORS

Q401	A6
Q402	A5
Q403	A4
Q5A1	C4
Q5A3	C5
Q5A4	C5
Q5A5	D4
Q5A6	D3
Q5F1	E7
Q5F2	F7
Q5F3	E7
Q5F4	F7
Q5F5	D4
Q5F6	D4
Q5J4	E5
Q5J5	F5
Q5J6	F5
Q5J7	E6
Q5J8	F6
Q5J9	F6
Q6S1	D7
Q6S2	D7
Q6S3	D7

RESISTORS

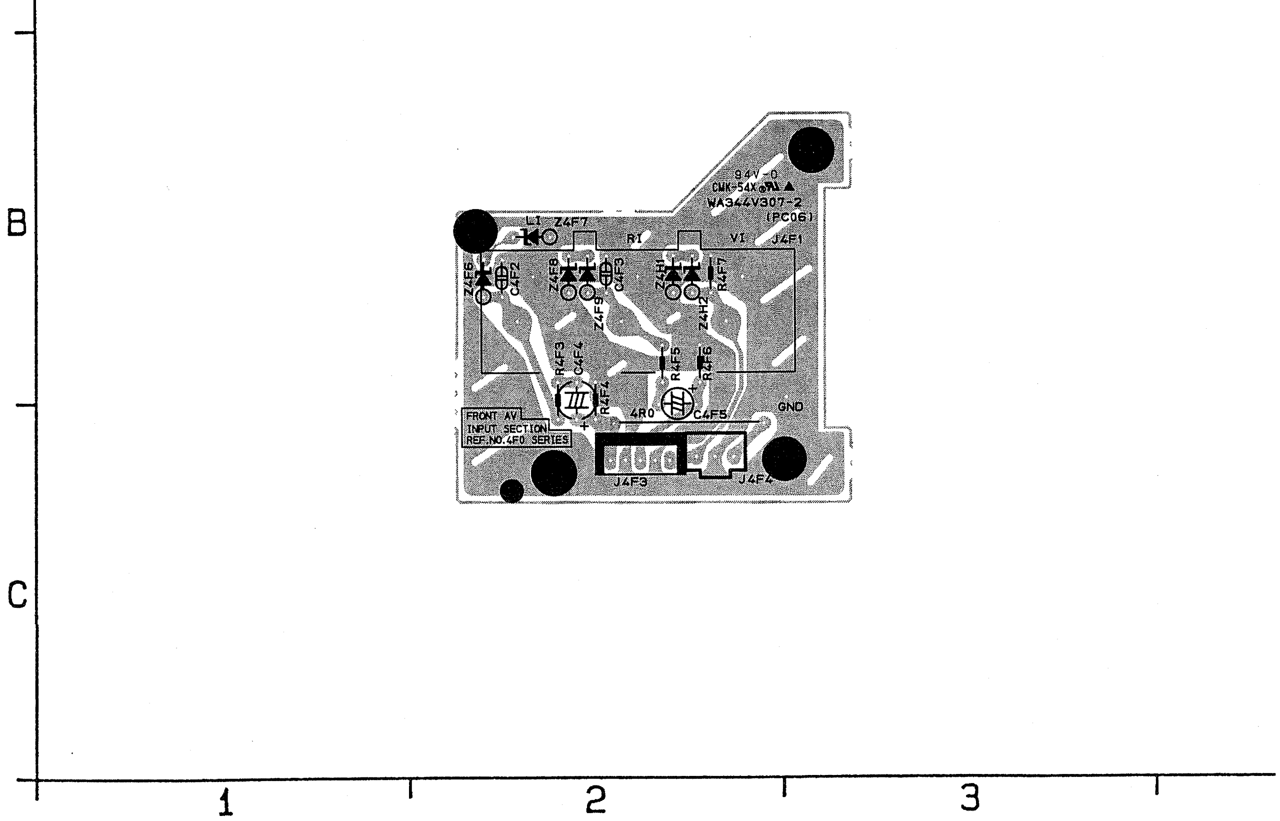
R401	B7
R426	A7
R427	A6
R428	A5
R429	A4
R430	B4
R5C4	C4
R5D0	B7
R5D3	C6
R5D4	C6
R5D5	B7
R5D6	C5
R5D7	C5
R5D8	C5
R5D9	C5
R5E1	D4
R5E2	D4
R5E3	D3
R5E4	D3
R5E5	D6
R5E6	D6
R5E7	C4
R5E8	B6
R5F1	E7
R5F2	E7
R5F4	F7
R5F5	F7
R5F6	F7
R5F8	F7
R5F9	F6
R5H1	D4
R5H2	D4
R5J3	E5
R5J6	E6
R5J9	F6
R5K0	F6
R5K1	E6
R5K2	F6
R5K3	F7
R5K4	E7
R5K5	F6
R5K6	F6
R5K7	E5
R5K8	E5
R6S1	D7
R6S2	D7
R6S3	D7

TEST POINTS

TP41	B7
TP42	B7

FRONT AV PCB DRAWING PC06

"Inserted components are dependent on set type"


A
B
C
1
2
3
94V-0
CMK-54X
WA344V307-2
(PC06)
L1
Z4F7
R1
V1
J4F1
Z4F6
C4F2
Z4F8
Z4F9
C4F3
Z4H1
Z4H2
R4F7
R4F3
C4F4
R4F4
R4F5
R4F6
4R0
C4F5
GND
FRONT AV INPUT SECTION REF.NO.4F0 SERIES
J4F3
J4F4

CAPACITORS	
C4F2	B2
C4F3	B2
C4F4	B2
C4F5	C2

CONNECTORS	
J4F1	B2
J4F3	C2
J4F4	C2

RESISTORS	
R4F3	B2
R4F4	B2
R4F5	B2
R4F6	B2
R4F7	B2

ZENERS	
Z4F6	B2
Z4F7	B2
Z4F8	B2
Z4F9	B2
Z4H1	B2
Z4H2	B2

FRONT AV SCHEMATIC DIAGRAM (IO-2)

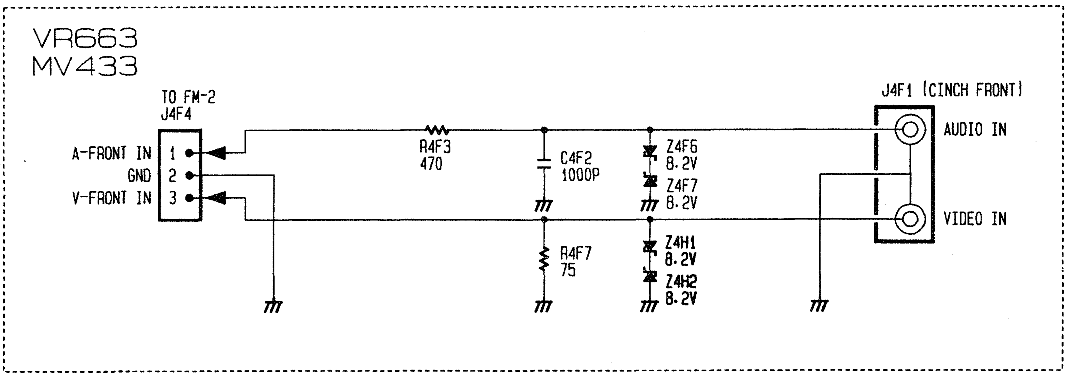
PC06

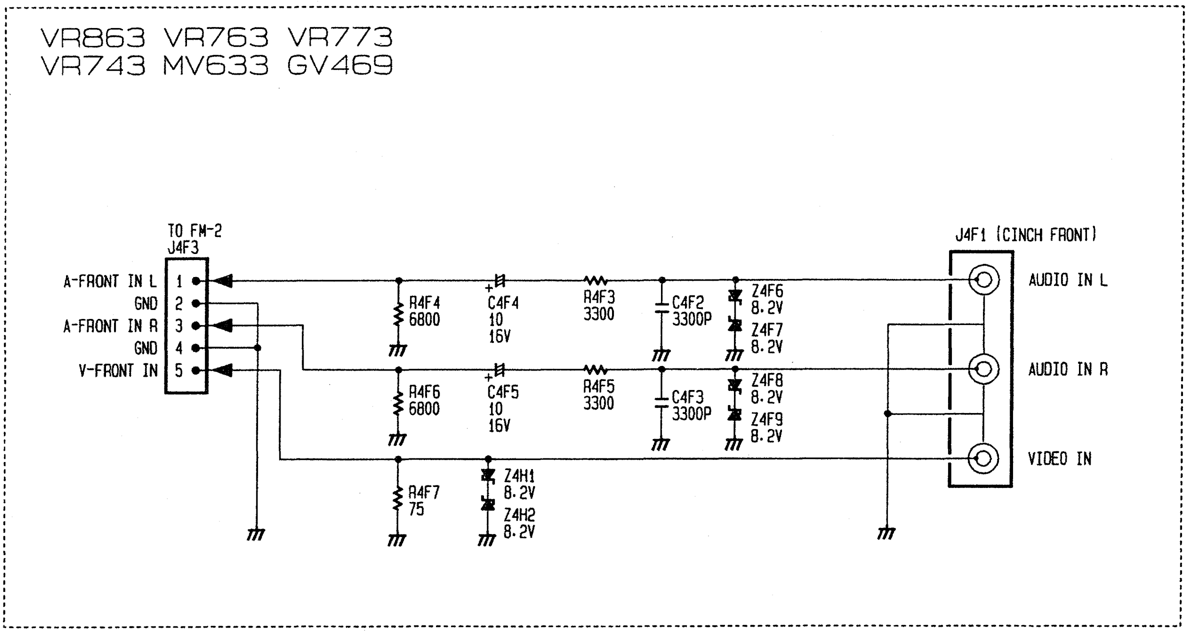
CAPACITORS	
C4F2	B2
C4F2	C2
C4F3	D2
C4F4	C2
C4F5	D2

CONNECTORS	
J4F1	B3
J4F1	C3
J4F3	C1
J4F4	B1

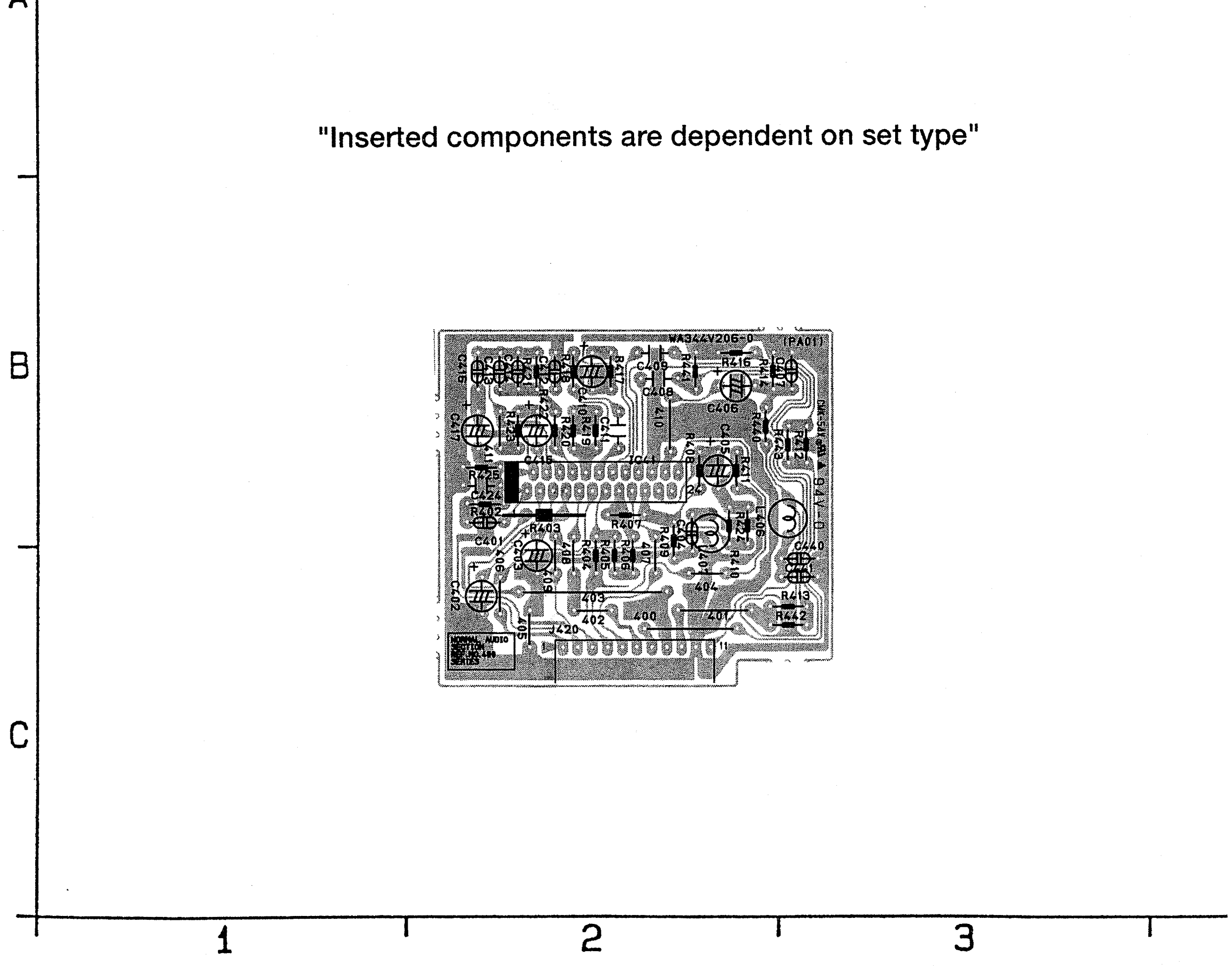
RESISTORS	
R4F3	B2
R4F3	C2
R4F4	C2
R4F5	D2
R4F6	D2
R4F7	B2
R4F7	D2

ZENERS	
Z4F6	B2
Z4F6	C3
Z4F7	B2
Z4F7	C3
Z4F8	D3
Z4F9	D3
Z4G1	B2
Z4G2	B2
Z4H1	D2
Z4H2	D2


VR663
MV433
TO FM-2
J4F4
A-FRONT IN 1
GND 2
V-FRONT IN 3
R4F3
470
C4F2
1000P
Z4F6
8.2V
Z4F7
8.2V
R4F7
75
Z4H1
8.2V
Z4H2
8.2V
J4F1 (CINCH FRONT)
AUDIO IN
VIDEO IN


VR863 VR763 VR773
VR743 MV633 GV469
TO FM-2
J4F3
A-FRONT IN L 1
GND 2
A-FRONT IN R 3
GND 4
V-FRONT IN 5
R4F4
6800
C4F4
10
16V
R4F3
3300
C4F2
3300P
Z4F6
8.2V
Z4F7
8.2V
R4F6
6800
C4F5
10
16V
R4F5
3300
C4F3
3300P
Z4F8
8.2V
Z4F9
8.2V
R4F7
75
Z4H1
8.2V
Z4H2
8.2V
J4F1 (CINCH FRONT)
AUDIO IN L
AUDIO IN R
VIDEO IN

NORMAL AUDIO PCB DRAWING PA01



"Inserted components are dependent on set type"

CAPACITORS	
C401	B2
C402	C2
C403	C2
C404	B2
C405	B2
C406	B2
C407	B3
C408	B2
C409	B2
C410	B2
C411	B2
C412	B2
C413	B2
C414	B2
C415	B2
C416	B2
C417	B2
C424	B2
C440	C3
C441	C3
IC	
IC41	B2
CONNECTOR	
J420	C2
COILS	
L406	B2
L407	C2
RESISTORS	
R402	B2
R403	B2
R404	C2
R405	C2
R406	C2
R407	B2
R408	B2
R409	B2
R410	C2
R411	B2
R412	B3
R413	C3
R414	B2
R416	B2
R417	B2
R418	B2
R419	B2
R420	B2
R421	B2
R422	B2
R423	B2
R424	B2
R425	B2
R440	B2
R441	B2
R442	C3
R443	B3

NORMAL AUDIO SCHEMATIC DIAGRAM (AD-1) PA01

⇦ MAIN SIGNAL PATH IN REC MODE

⬅ MAIN SIGNAL PATH IN PB MODE

VR663
MV433

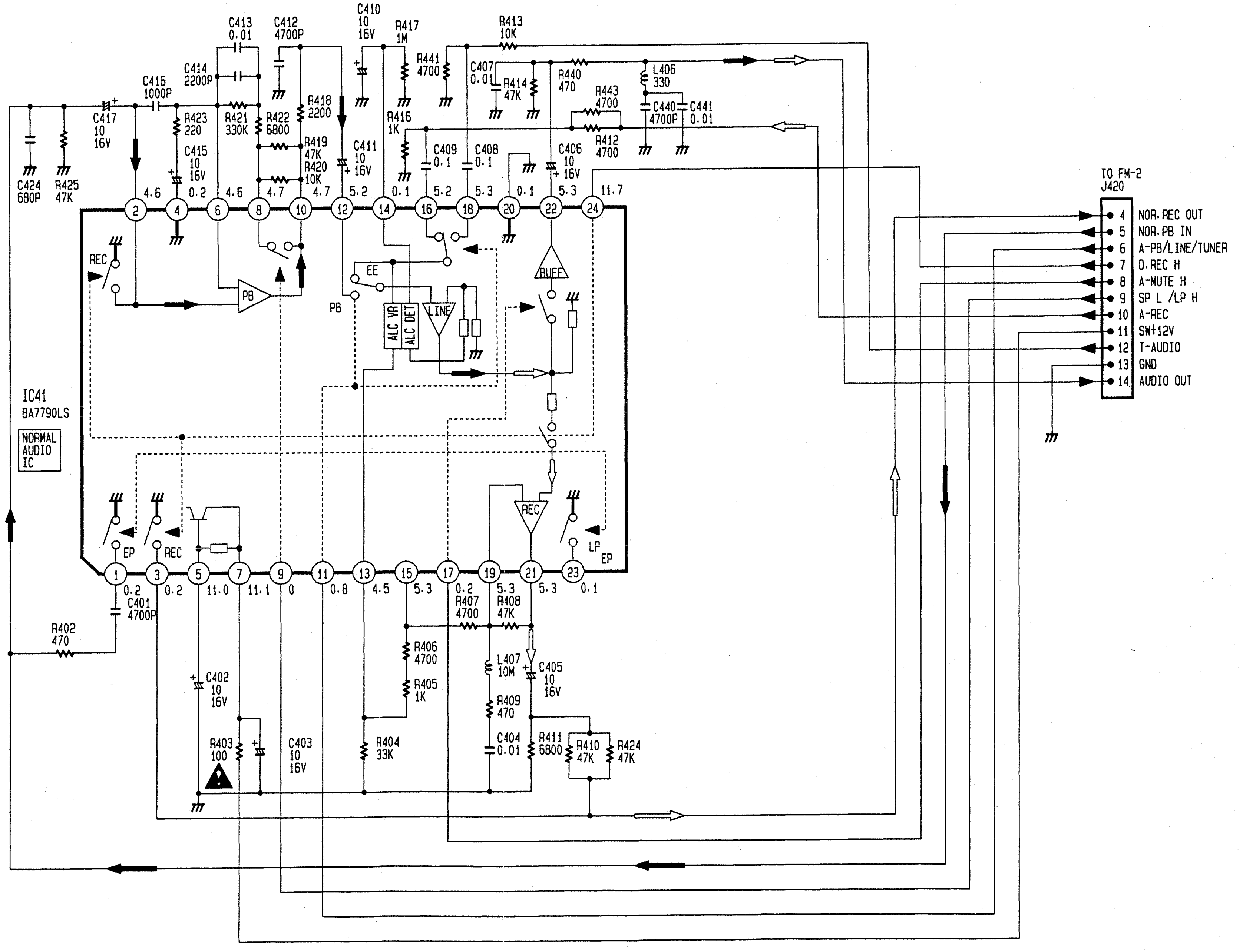
CAPACITORS	
C401	D3
C402	D3
C403	D3
C404	D4
C405	D4
C406	B4
C407	B4
C408	B4
C409	B4
C410	B4
C411	B4
C412	B3
C413	B3
C414	B3
C415	B3
C416	B3
C417	B3
C424	B2
C440	B5
C441	B5

IC	
IC41	C3

CONNECTOR	
J420	B6

COILS	
L406	B5
L407	D4

RESISTORS	
R402	D3
R403	D3
R404	D4
R405	D4
R406	D4
R407	D4
R408	D4
R409	D4
R410	D4
R411	D4
R412	B5
R413	B4
R414	B4
R416	B4
R417	B4
R418	B4
R419	B4
R420	B4
R421	B3
R422	B3
R423	B3
R424	D5
R425	B3
R440	B4
R441	B4
R443	B5

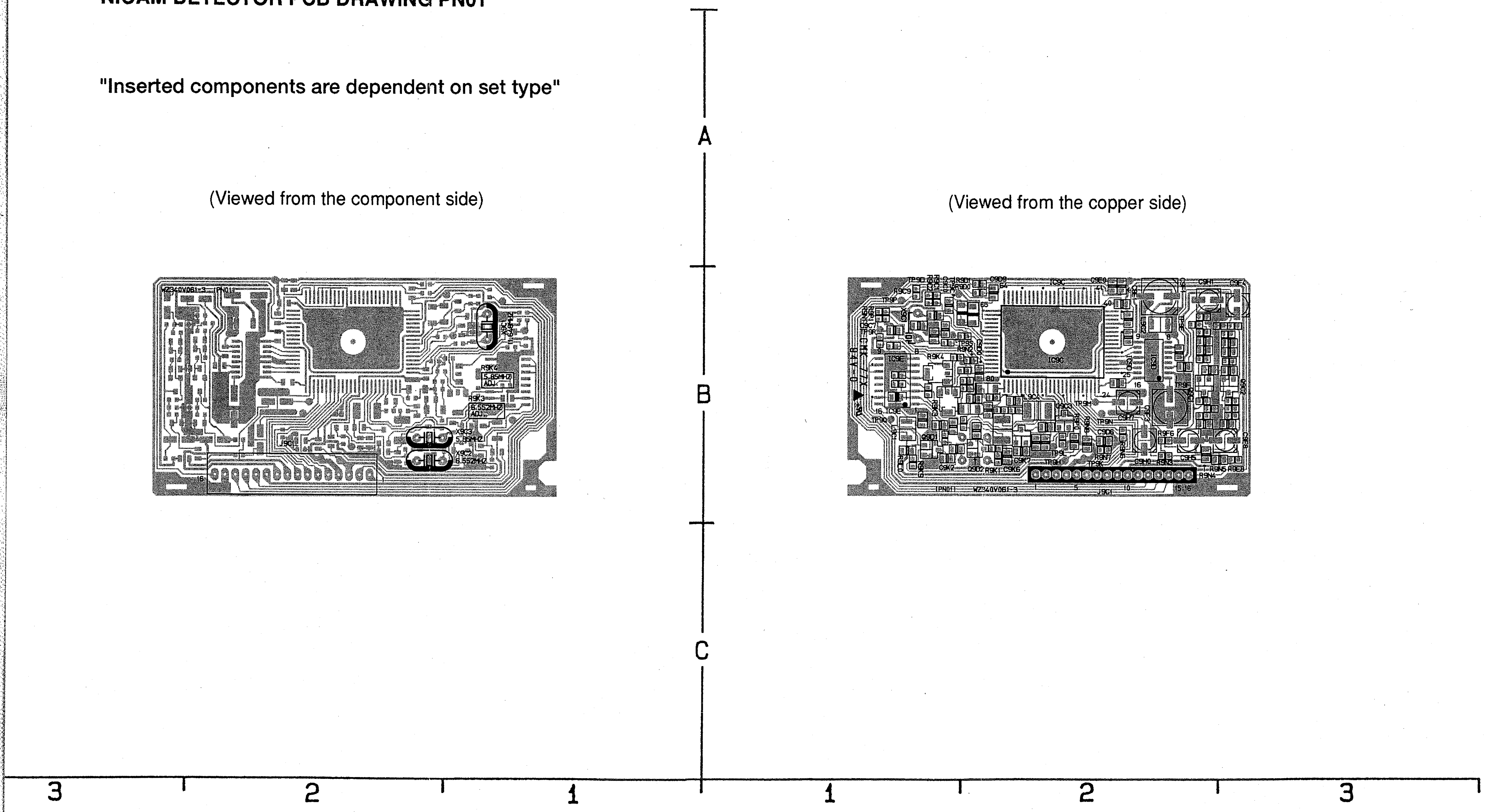

C413 0.01
C412 4700P
C410 10 16V
R417 1M
R413 10K
C414 2200P
C416 1000P
R441 4700
C407 0.01
R414 47K
R440 470
L406 330
R443 4700
C440 4700P
C441 0.01
C417 10 16V
R423 220
R421 330K
R422 6800
R418 2200
R416 1K
R419 47K
R420 10K
C411 10 16V
C409 0.1
C408 0.1
C406 10 16V
R412 4700
C415 10 16V
C424 680P
R425 47K
4.6
0.2
4.6
4.7
4.7
5.2
0.1
5.2
5.3
0.1
5.3
11.7
REC
EE
PB
ALC VR
ALC DET
LINE
BUFF
IC41
BA7790LS
NORMAL AUDIO IC
REC
EP
REC
LP
EP
0.2
0.2
11.0
11.1
0
0.8
4.5
5.3
0.2
5.3
5.3
0.1
C401 4700P
R402 470
R407 4700
R408 47K
R406 4700
R405 1K
L407 10M
C405 10 16V
C402 10 16V
R409 470
R403 100
C403 10 16V
R404 33K
C404 0.01
R411 6800
R410 47K
R424 47K
TO FM-2
J420
4 NOR.REC OUT
5 NOR.PB IN
6 A-PB/LINE/TUNER
7 D.REC H
8 A-MUTE H
9 SP L /LP H
10 A-REC
11 SW+12V
12 T-AUDIO
13 GND
14 AUDIO OUT

A
B
C
D
E

1 2 3 4 5 6 7

NICAM DETECTOR PCB DRAWING PN01

"Inserted components are dependent on set type"



(Viewed from the component side)

(Viewed from the copper side)

(Viewed from the component side)

CONNECTOR	
J9C1	B2

RESISTORS	
R9K3	B1
R9K4	B1

X'TALS	
X9C1	B1
X9C2	B2
X9C3	B2

(Viewed from the copper side)

CAPACITORS	
C8E1	B2
C9C0	B1
C9C7	B1
C9D0	B2
C9D6	B2
C9D9	B2
C9E0	B2
C9F1	B2
C9F3	B2
C9F4	B3
C9F8	B3
C9H0	B2
C9H1	B2
C9H5	B2
C9H7	B2
C9K2	B1
C9K6	B2
C9K7	B2

ICs	
IC9C	B2
IC9D	B2
IC9E	B1

CONNECTOR	
J9C1	B2

COILS	
L9C1	B1
L9C2	B2
L9C4	B2

TRANSISTORS	
Q9C1	B2
Q9C2	B3
Q9C3	B2
Q9D1	B1
Q9D2	B2

RESISTORS	
R9C1	B1
R9C2	B1
R9C9	B1
R9D0	B2
R9D1	B2
R9E8	B3
R9F6	B2
R9K1	B2
R9K3	B1
R9K4	B1
R9K9	B1
R9L0	B1
R9N1	B1
R9N2	B2
R9N3	B2
R9N4	B2
R9N5	B3
R9N7	B2
R9N8	B2
R9P0	B2
R9P1	B1

TEST POINTS	
TP9C	B1
TP9D	B1
TP9E	B2
TP9F	B2
TP9H	B2
TP9K	B2
TP9L	B2
TP9M	B2
TP9N	B2
TP9P	B1
TP9Q	B1
TP9R	B1
TP9S	B2

X'TAL	
X9C1	B1

PM03 (NI-1)

CAPACITORS	
C951	F6
C953	E6
C955	D1
C956	D2
C957	D2
C959	E2
C960	E2
C961	E4
C962	E4
C963	E4
C964	D4
C965	C4
C966	C4
C967	E6
C968	C4
C969	B5
C971	B6
C972	B6
C973	C5
C974	C5
C975	C6
C976	C6
C977	B6
C978	D2
C979	E2
C980	E6
C981	E6
C982	C6
C983	C6
C984	C6
C985	D6
C986	D6
C987	D6
C988	D6
C989	D7
C990	D7

DIODES	
D951	F7
D952	F7

FILTERS	
FL95	E3
FL96	E3
FL97	B5
FL98	C5

ICs	
IC95	C3
IC96	D6

CONNECTOR	
J9C1	F7

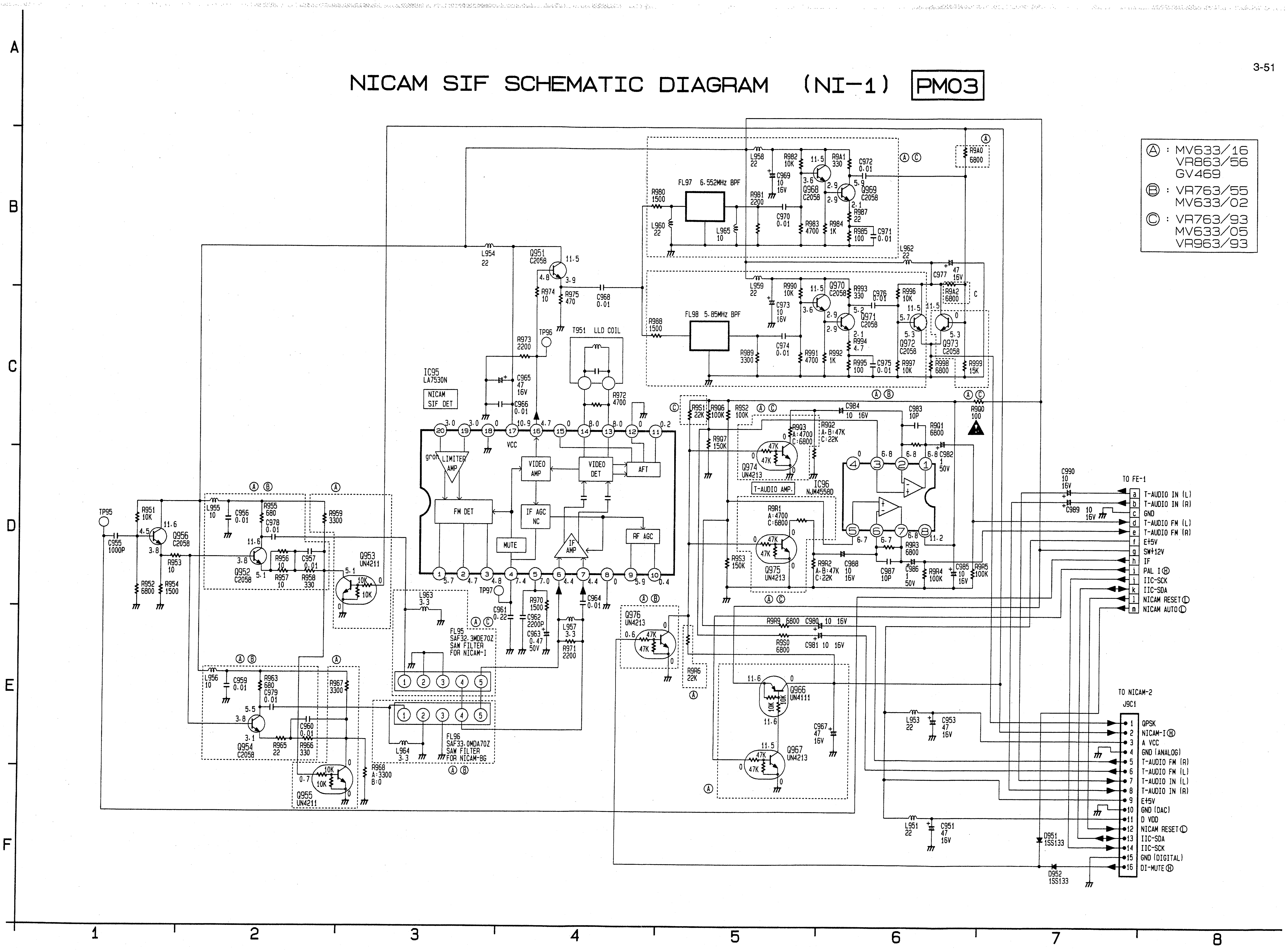
COILS	
L951	F6
L953	E6
L954	B3
L955	D2
L956	E2
L957	E4
L958	B5
L959	B5
L960	B5
L962	B6
L963	D3
L964	E3
L965	B5
T951	C4

TRANSISTORS	
Q951	B4
Q952	D2
Q953	D3
Q954	E2
Q955	F2
Q956	D1
Q966	E5
Q967	E5
Q968	B6
Q969	B6
Q970	C6
Q971	C6
Q972	C6
Q973	C6
Q974	D5
Q975	D5
Q976	E4

RESISTORS	
R951	D1
R952	D1
R953	D1
R954	D1
R955	D2
R956	D2
R957	D2
R958	D2
R959	D2
R963	E2
R965	E2
R966	E2
R967	E3
R970	D4
R971	E4
R972	C4
R973	C4
R974	C4
R975	C4
R980	B4
R981	B5
R982	B5
R983	B5
R984	B6
R985	B6
R987	B6
R988	C4
R989	C5
R991	C5
R992	C6
R993	C6
R994	C6
R995	C6
R996	C6
R997	C6
R998	C6
R999	C6
R9A0	B6
R9A1	B6
R9A2	B6
R9Q0	C6
R9Q1	C6
R9Q2	D5
R9Q3	C5
R9Q6	C5
R9Q7	C5
R9R1	D5
R9R2	D5
R9R3	D6
R9R4	D6
R9R5	D6
R9R6	E5
R9R9	E5
R9S0	E5
R9S1	C5
R9S2	C5
R9S3	D5

TEST POINTS	
TP95	D1
TP96	C4
TP97	D3

NICAM SIF SCHEMATIC DIAGRAM (NI-1) PM03

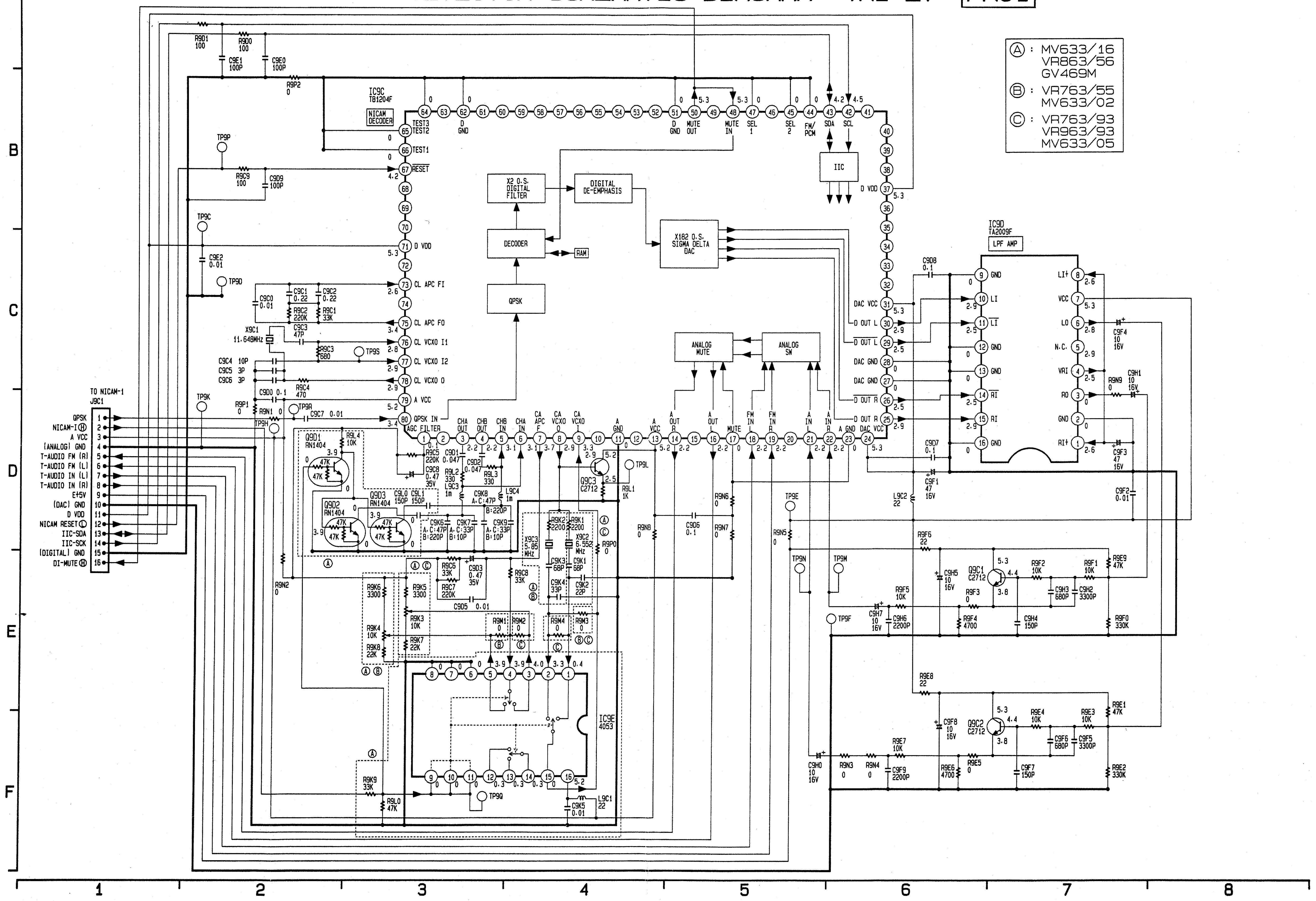

Ⓐ : MV633/16
VR863/56
GV469
Ⓑ : VR763/55
MV633/02
Ⓒ : VR763/93
MV633/05
VR963/93
A
B
C
D
E
F
1
2
3
4
5
6
7
8
IC95
LA7530N
NICAM
SIF DET
LIMITER AMP
FM DET
VIDEO AMP
VIDEO DET
AFT
IF AGC NC
MUTE
IF AMP
RF AGC
VCC
T951 LLD COIL
TP95
TP96
TP97
Q951 C2058
Q952 C2058
Q953 UN4211
Q954 C2058
Q955 UN4211
Q956 C2058
Q966 UN4111
Q967 UN4213
Q968 C2058
Q969 C2058
Q970 C2058
Q971 C2058
Q972 C2058
Q973 C2058
Q974 UN4213
Q975 UN4213
Q976 UN4213
FL97 6.552MHz BPF
FL98 5.85MHz BPF
FL95 SAF32.3MDE70Z SAW FILTER FOR NICAM-I
FL96 SAF33.0MDA70Z SAW FILTER FOR NICAM-BG
IC96 NJM4558D
T-AUDIO AMP.
D951 1SS133
D952 1SS133
TO FE-1
a T-AUDIO IN (L)
b T-AUDIO IN (R)
c GND
d T-AUDIO FM (L)
e T-AUDIO FM (R)
f E+5V
g SW+12V
h IF
i PAL I Ⓗ
j IIC-SCK
k IIC-SDA
l NICAM RESET Ⓛ
m NICAM AUTO Ⓛ
TO NICAM-2
J9C1
1 QPSK
2 NICAM-I Ⓗ
3 A VCC
4 GND (ANALOG)
5 T-AUDIO FM (R)
6 T-AUDIO FM (L)
7 T-AUDIO IN (L)
8 T-AUDIO IN (R)
9 E+5V
10 GND (DAC)
11 D VDD
12 NICAM RESET Ⓛ
13 IIC-SDA
14 IIC-SCK
15 GND (DIGITAL)
16 DI-MUTE Ⓗ

NICAM DETECTOR SCHEMATIC DIAGRAM (NI-2) PNO1

Ⓐ : MV633/16
VR863/56
GV469M

Ⓑ : VR763/55
MV633/02

Ⓒ : VR763/93
VR963/93
MV633/05


A
B
C
D
E
F
1
2
3
4
5
6
7
8
IC9C
TB1204F
NICAM DECODER
TEST3
TEST2
TEST1
RESET
D VDD
CL APC FI
CL APC FO
CL VCXO I1
CL VCXO I2
CL VCXO O
A VCC
QPSK IN
AGC FILTER
CHA OUT
CHB OUT
CHB IN
CHA IN
CA APC F
CA VCXO O
CA VCXO I
A GND
A VCC
A OUT R
A OUT L
MUTE
FM IN L
FM IN R
A IN L
A IN R
A GND
DAC VCC
D GND
MUTE OUT
MUTE IN
SEL 1
SEL 2
FM/PCM
SDA
SCL
D OUT L
D OUT R
DAC GND
X2 O.S. DIGITAL FILTER
DIGITAL DE-EMPHASIS
DECODER
RAM
QPSK
X182 O.S. SIGMA DELTA DAC
ANALOG MUTE
ANALOG SW
IIC
IC9D
TA2009F
LPF AMP
GND
LI
VCC
LO
N.C.
VRI
RO
RI
IC9E
4053
TO NICAM-1
J9C1
QPSK
NICAM-I Ⓗ
A VCC
(ANALOG) GND
T-AUDIO FM (R)
T-AUDIO FM (L)
T-AUDIO IN (L)
T-AUDIO IN (R)
E+5V
(DAC) GND
D VDD
NICAM RESET Ⓛ
IIC-SDA
IIC-SCK
(DIGITAL) GND
DI-MUTE Ⓗ
X9C1
11.648MHz
X9C3
5.85 MHz
X9C2
6.552 MHz
Q9D1 RN1404
Q9D2 RN1404
Q9D3 RN1404
Q9C3 C2712
Q9C1 C2712
Q9C2 C2712
TP9P
TP9C
TP9D
TP9K
TP9R
TP9H
TP9S
TP9L
TP9E
TP9N
TP9M
TP9F
TP9Q

PN01 (NI-2)

CAPACITORS

C9C0	C2
C9C1	C2
C9C2	C2
C9C3	C2
C9C4	C2
C9C5	C2
C9C6	C2
C9C7	D2
C9C8	D3
C9D0	D2
C9D1	D3
C9D2	D3
C9D3	E3
C9D5	E3
C9D6	D5
C9D7	D6
C9D8	C6
C9D9	B2
C9E0	A2
C9E1	A2
C9E2	C2
C9F1	D6
C9F2	D7
C9F3	D7
C9F4	C7
C9F5	F7
C9F6	F7
C9F7	F7
C9F8	F6
C9F9	F6
C9H0	F5
C9H1	C7
C9H2	E7
C9H3	E7
C9H4	E7
C9H5	E6
C9H6	E6
C9H7	E6
C9K1	E4
C9K2	E4
C9K3	E4
C9K4	E4
C9K5	F4
C9K6	D3
C9K7	D3
C9K8	D3
C9K9	D4
C9L0	D3
C9L1	D3

ICs

IC9C	B3
IC9D	C7
IC9E	F4

CONNECTOR

J9C1	D1

COILS

L9C1	F4
L9C2	D6
L9C3	D3
L9C4	D3

TRANSISTORS

Q9C1	E7
Q9C2	F7
Q9C3	D4
Q9D1	D2
Q9D2	D2
Q9D3	D3

RESISTORS

R9C1	C2
R9C2	C2
R9C3	C2
R9C4	C2
R9C5	D3
R9C6	E3
R9C7	E3
R9C8	E4
R9C9	B2
R9D0	A2
R9D1	A2
R9E1	F7
R9E2	F7
R9E3	F7
R9E4	F7
R9E5	F6
R9E6	F6
R9E7	F6
R9E8	E6
R9E9	E7
R9F0	E7
R9F1	E7
R9F2	E7
R9F3	E6
R9F4	E6
R9F5	E6
R9F6	D6
R9K1	D4
R9K2	D4
R9K3	E3
R9K4	E3
R9K5	E3
R9K6	E3
R9K7	E3
R9K8	E3
R9K9	F3
R9L0	F3
R9L1	D4
R9L2	D3
R9L3	D3
R9L4	D2
R9M1	E3
R9M2	E4
R9M3	E4
R9M4	E4
R9N1	D2
R9N2	E2
R9N3	F6
R9N4	F6
R9N5	D5
R9N6	D5
R9N7	D5
R9N8	D4
R9N9	C7
R9P0	D4
R9P1	D2
R9P2	B2

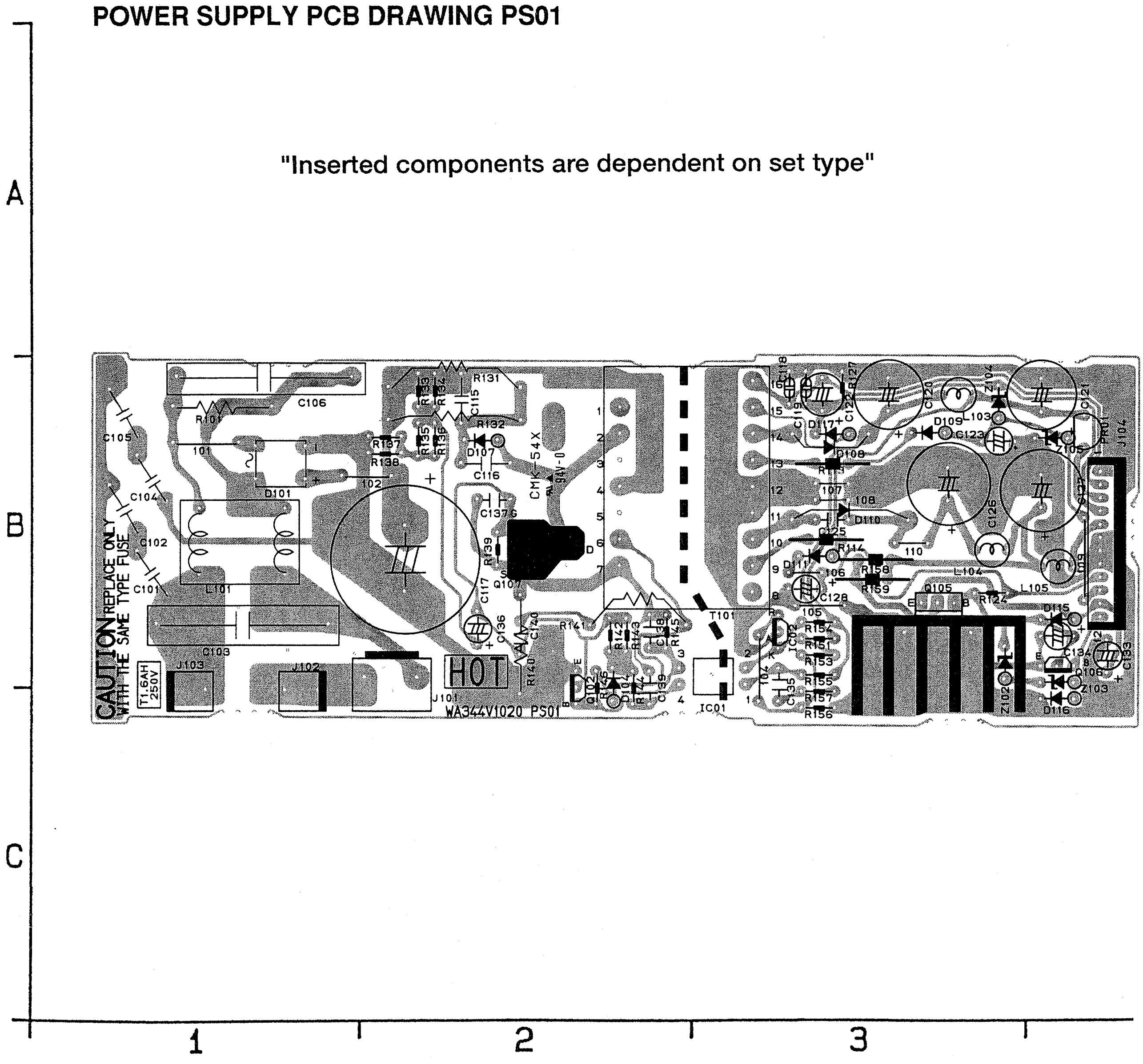
TEST POINTS

TP9C	B2
TP9D	C2
TP9E	D5
TP9F	E6
TP9G	F3
TP9H	D2
TP9K	D2
TP9L	D4
TP9M	E6
TP9N	E5
TP9P	B2
TP9R	D2
TP9S	C3
TP9R	D2
TP9S	C3

X'TALS

X9C1	C2
X9C2	D4
X9C3	D4

POWER SUPPLY PCB DRAWING PS01


"Inserted components are dependent on set type"
A
B
C
1
2
3
CAUTION REPLACE ONLY WITH THE SAME TYPE FUSE
T1.6AH 250V
HOT
WA344V1020 PS01
CMK-54X
94V-0
C101
C102
C103
C104
C105
C106
L101
D101
R101
J101
J102
J103
J104
R131
R132
R133
R134
R135
R136
R137
R138
C115
C116
C117
C136
C137
D107
Q107
R139
R140
R141
R142
R143
R145
C140
T101
IC01
IC02
C118
C119
C120
C121
C122
C123
C125
C126
C127
C128
C133
C134
C135
D108
D109
D110
D111
D115
D116
D117
L103
L104
L105
Q105
Q106
R113
R114
R124
R127
R151
R153
R155
R157
R156
R158
R159
Z102
Z103
Z104
Z105
PR01

CAPACITORS	
C101	B1
C102	B1
C103	B1
C104	B1
C105	B1
C106	B1
C115	B2
C116	B2
C117	B2
C118	B3
C119	B3
C120	B3
C121	B4
C122	B3
C123	B3
C125	B3
C126	B3
C127	B4
C128	B3
C133	B4
C134	B4
C135	B3
C136	B2
C137	B2
C138	B2
C139	C2
C140	B2

DIODES	
D101	B1
D104	C2
D107	B2
D108	B3
D109	B3
D110	B3
D115	B4
D116	C4
D117	B3

ICs	
IC01	B3
IC02	B3

CONNECTORS	
J101	B2
J102	B1
J103	B1
J104	B4

COILS	
L101	B1
L103	B3
L104	B3
L105	B4

TRANSISTORS	
Q102	C2
Q105	B3
Q106	B4
Q107	B2

RESISTORS	
R101	B1
R113	B3
R114	B3
R124	B3
R127	B3
R131	B2
R132	B2
R133	B2
R134	B2
R135	B2
R136	B2
R137	B2
R138	B2
R139	B2
R140	B2
R141	B2
R142	B2
R143	B2
R144	C2
R145	B2
R146	C2
R151	B3
R153	B3
R154	B3
R155	B3
R156	C3
R157	C3
R158	B3
R159	B3

ZENERS	
Z102	B3
Z103	B4
Z104	B3
Z105	B4

OTHERS	
PR01	B4
T101	B3

POWER SUPPLY SCHEMATIC DIAGRAM (PS) PS01

CAPACITORS
C101 B1
C102 B1
C103 B1
C104 B2
C105 B2
C106 B2
C115 B4
C116 B5
C117 B3
C118 B6
C119 B6
C120 B5
C121 B6
C122 B6
C123 B6
C125 C5
C126 C6
C127 C6
C128 C6
C133 D7
C134 D6
C135 D5
C136 B4
C137 C3
C138 C4
C139 C4
C140 C4

DIODES
D101 B3
D104 C4
D107 B4
D108 B5
D109 B5
D110 C5
D111 C5
D115 D6
D116 D6
D117 B5

FUSE
F101 B1

ICs
IC01 C5
IC02 D5

CONNECTORS
J101 B1
J102 B1
J103 B1
J104 B7

COILS
L101 B2
L103 B6
L104 C6
L105 C7

TRANSISTORS
Q102 C3
Q105 C6
Q106 D6
Q107 C3

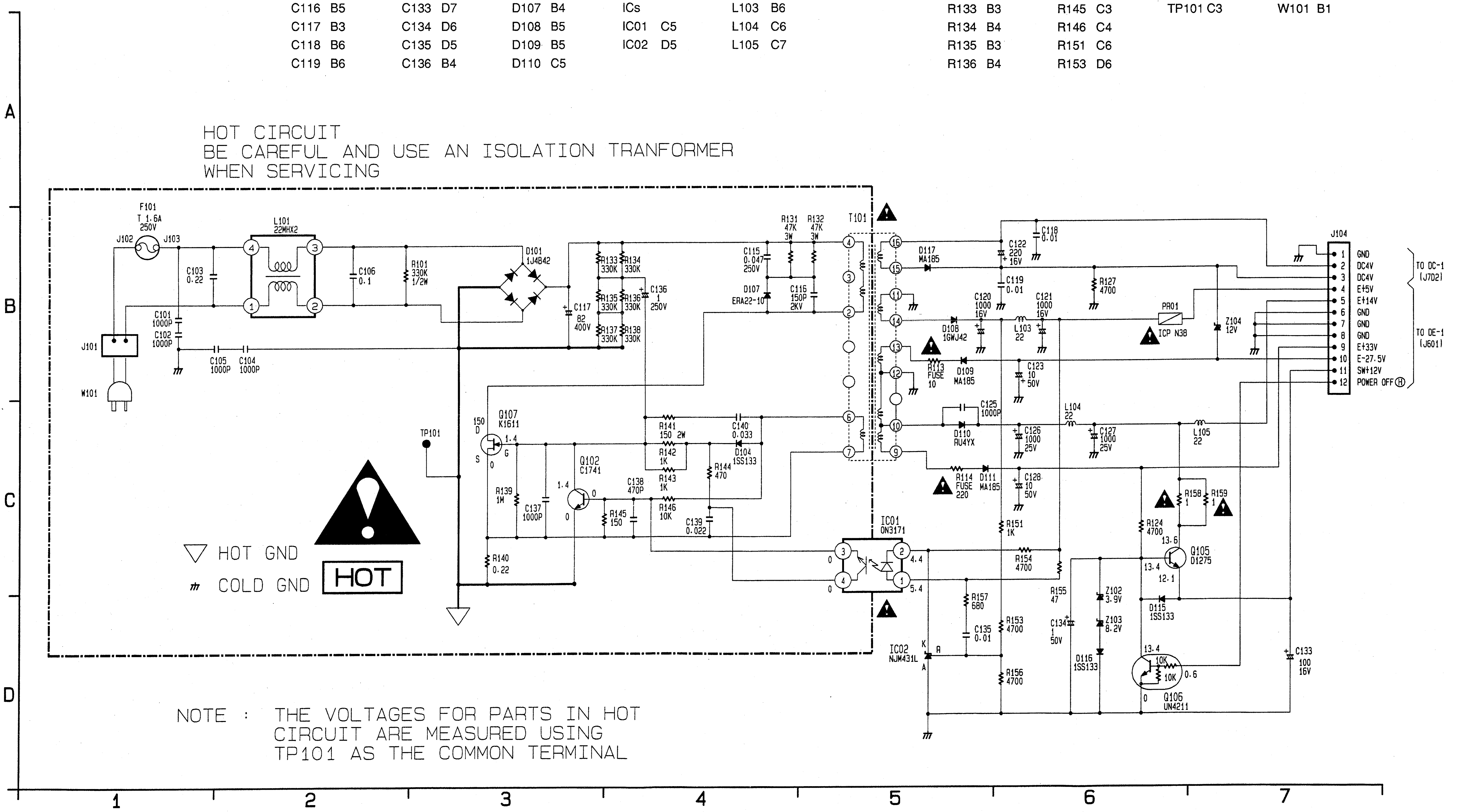
RESISTORS
R101 B3
R113 B5
R114 C5
R124 C6
R127 B6
R131 B4
R132 B5
R133 B3
R134 B4
R135 B3
R136 B4
R137 B3
R138 B4
R139 C3
R140 C3
R141 C4
R142 C4
R143 C4
R144 C4
R145 C3
R146 C4
R151 C6
R153 D6
R154 C6
R155 C6
R156 D6
R157 D5
R158 C6
R159 C7

TEST POINT
TP101 C3

ZENERS
Z102 D6
Z103 D6
Z104 B7

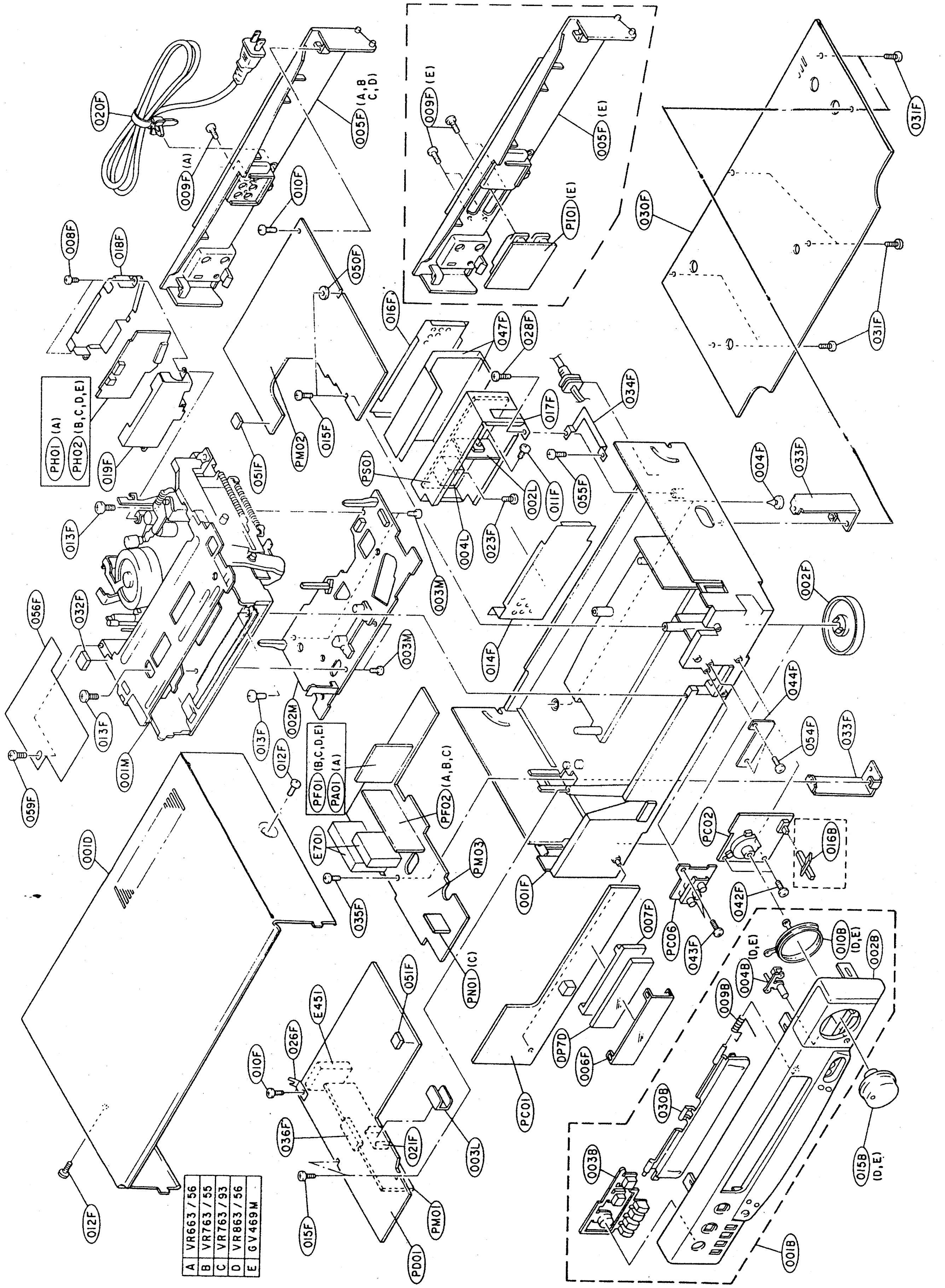
OTHERS
PR01 B6
T101 B5
W101 B1

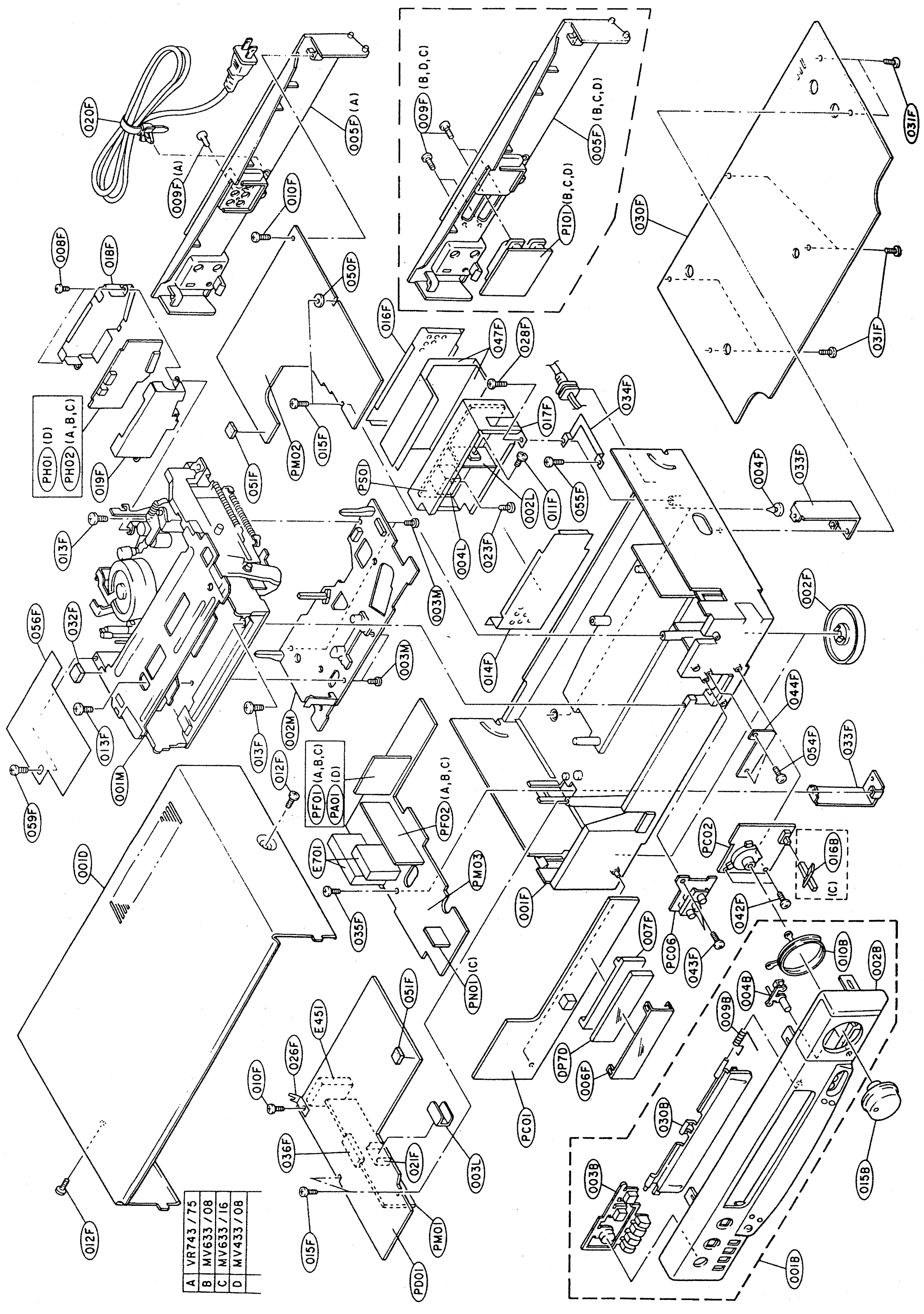
HOT CIRCUIT
BE CAREFUL AND USE AN ISOLATION TRANFORMER
WHEN SERVICING


A
B
C
D
1
2
3
4
5
6
7
F101
T 1.6A
250V
J102
J103
L101
22MHX2
C103
0.22
C106
0.1
R101
330K
1/2W
C101
1000P
C102
1000P
J101
C105
1000P
C104
1000P
W101
D101
1J4B42
C117
82
400V
R133
330K
R134
330K
R135
330K
R136
330K
R137
330K
R138
330K
C136
1
250V
R131
47K
3W
R132
47K
3W
C115
0.047
250V
D107
ERA22-10
C116
150P
2KV
T101
D117
MA185
C122
220
16V
C118
0.01
C119
0.01
R127
4700
C120
1000
16V
C121
1000
16V
L103
22
D108
1GWJ42
PR01
ICP N38
Z104
12V
R113
FUSE
10
D109
MA185
C123
10
50V
C125
1000P
D110
RU4YX
C126
1000
25V
L104
22
C127
1000
25V
L105
22
J104
1 GND
2 DC4V
3 DC4V
4 E+5V
5 E+14V
6 GND
7 GND
8 GND
9 E+33V
10 E-27.5V
11 SW+12V
12 POWER OFF H
TO DC-1
(J702)
TO DE-1
(J601)
Q107
K1611
TP101
R141
150 2W
C140
0.033
R142
1K
D104
1SS133
R144
470
R143
1K
C138
470P
Q102
C1741
R139
1M
C137
1000P
R145
150
R146
10K
C139
0.022
R140
0.22
R114
FUSE
220
D111
MA185
C128
10
50V
R158
1
R159
1
R124
4700
Q105
D1275
R151
1K
IC01
ON3171
R154
4700
R157
680
C135
0.01
R153
4700
R155
47
C134
1
50V
Z102
3.9V
Z103
8.2V
D115
1SS133
D116
1SS133
IC02
NJM431L
R156
4700
Q106
UN4211
C133
100
16V
HOT GND
COLD GND
HOT

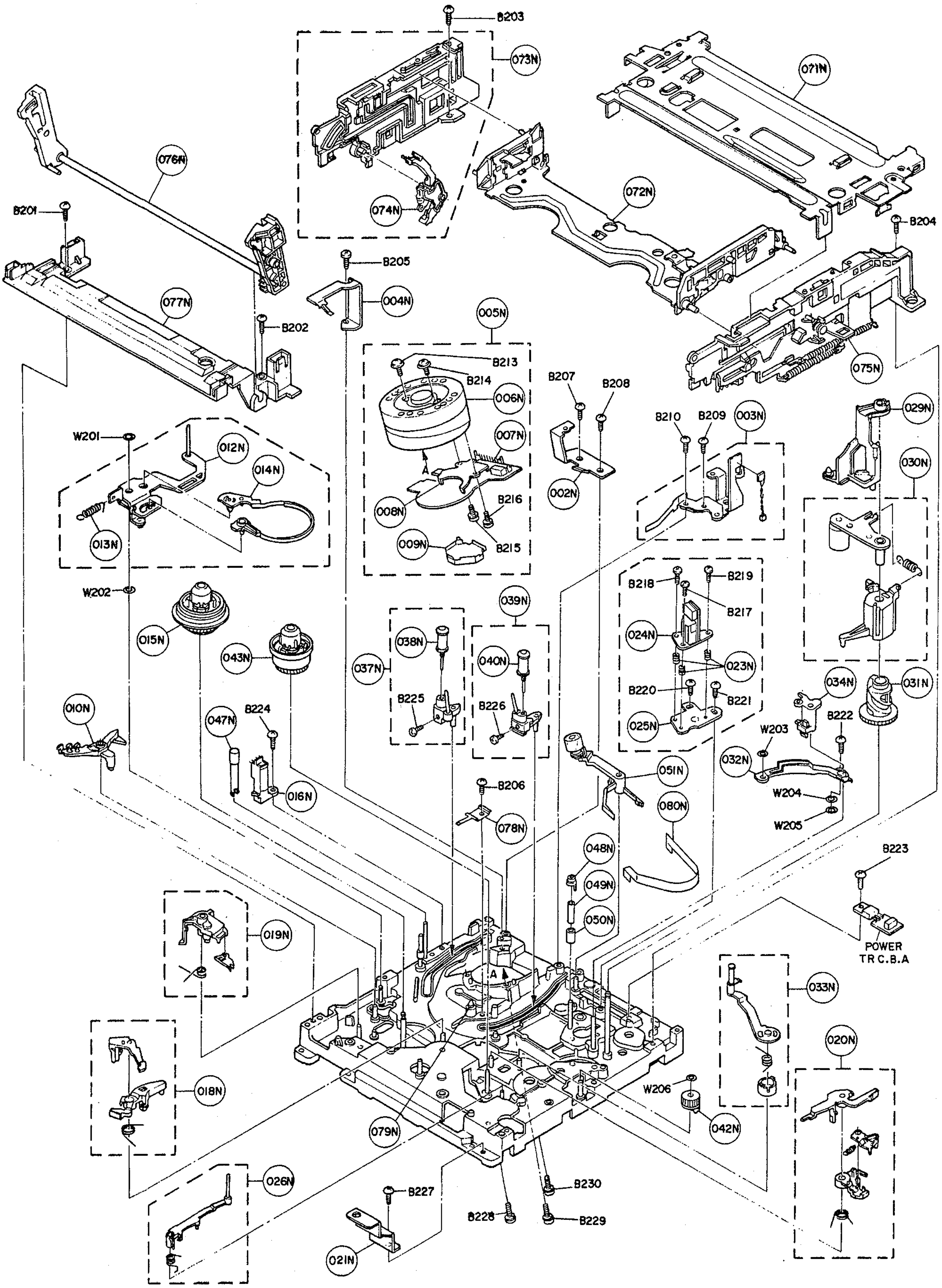
NOTE : THE VOLTAGES FOR PARTS IN HOT
CIRCUIT ARE MEASURED USING
TP101 AS THE COMMON TERMINAL

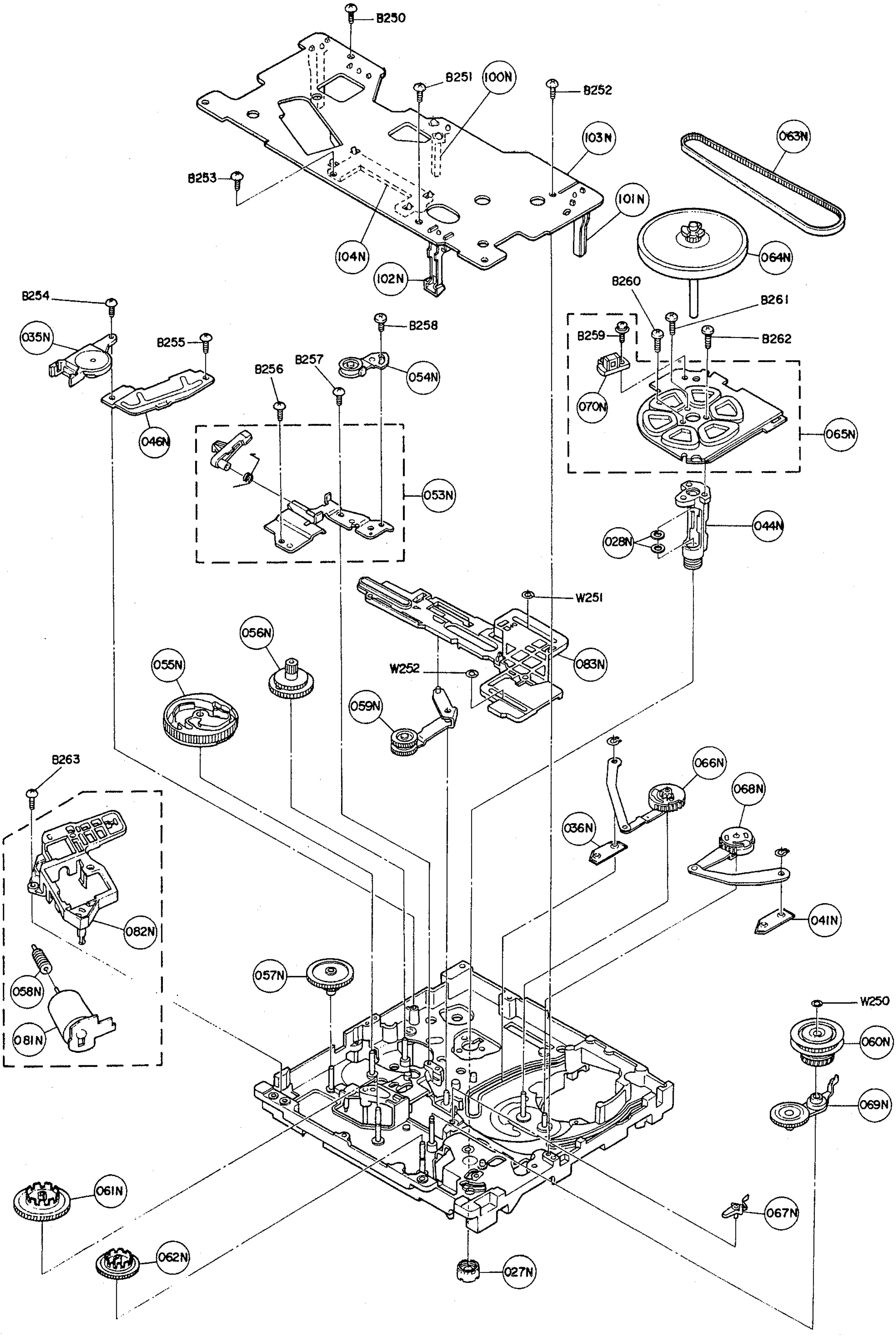
1. CABINET EXPLODED VIEW


A VR663/56
B VR763/55
C VR763/93
D VR863/56
E GV469M
020F
009F (A)
005F (A,B C,D)
010F
008F
018F
PH01 (A)
PH02 (B,C,D,E)
019F
013F
056F
032F
013F
059F
001M
001D
012F
013F
002M
003M
003M
051F
PM02
015F
016F
050F
009F (E)
005F (E)
P101 (E)
047F
028F
017F
034F
PS01
002L
011F
004L
023F
055F
030F
031F
031F
004F
033F
002F
014F
044F
054F
033F
PF01 (B,C,D,E)
PA01 (A)
PF02 (A,B,C)
E701
PM03
035F
001F
PC02
016B
042F
PC06
043F
007F
010B (D,E)
002B
004B (D,E)
009B
PN01 (C)
0P7D
006F
PC01
030B
003B
001B
015B (D,E)
E451
026F
010F
051F
021F
003L
036F
015F
PM01
PD01
012F


A VR743/75
B MV633/08
C MV633/16
D MV433/08
020F
009F (A)
005F (A)
010F
008F
018F
009F (B,D,C)
005F (B,C,D)
P101 (B,C,D)
PH01 (D)
PH02 (A,B,C)
019F
013F
056F
032F
013F
059F
001M
001D
012F
013F
002M
003M
003M
051F
PM02
015F
016F
050F
047F
028F
017F
034F
PS01
002L
011F
004L
023F
055F
030F
031F
031F
004F
033F
002F
014F
044F
054F
033F
PF01 (A,B,C)
PA01 (D)
PF02 (A,B,C)
E701
PM03
035F
001F
PC02
016B (C)
042F
PC06
043F
007F
010B
002B
004B
009B
PN01 (C)
0P7D
006F
PC01
030B
003B
001B
015B
E451
026F
010F
051F
021F
003L
036F
015F
PM01
PD01
012F

2. EXPLODED VIEW OF THE TAPEDECK


B203
073N
071N
076N
074N
072N
B201
B204
B205
004N
077N
B202
005N
B213
B214
006N
B207
B208
075N
029N
B210
B209
003N
007N
W201
012N
014N
008N
B216
002N
030N
013N
009N
B215
B218
B219
B217
W202
039N
015N
024N
038N
043N
037N
040N
023N
B220
B221
034N
031N
010N
B224
B225
B226
047N
B222
025N
W203
032N
051N
016N
B206
W204
080N
078N
W205
B223
048N
049N
050N
POWER
TR C.B.A
019N
033N
020N
018N
W206
042N
079N
026N
B227
B230
B228
B229
021N
A


B250
B251
100N
B252
103N
063N
B253
101N
064N
104N
102N
B254
B260
B261
035N
B258
B259
B262
B255
B257
054N
B256
070N
065N
046N
053N
044N
028N
W251
056N
055N
083N
W252
059N
B263
066N
068N
036N
041N
082N
057N
W250
058N
060N
081N
069N
061N
067N
062N
027N

Set

PANEL

001B	4822 443 41346	FRONT K (VR863/56)
001B	4822 443 41337	FRONT K (MV633/02/16)
001B	4822 443 41354	FRONT K (MV633/05)
001B	4822 443 41349	FRONT K (VR663/56)
001B	4822 443 41355	FRONT K (VR773/93)
001B	4822 443 41347	FRONT K (VR763/55)
001B	4822 443 41338	FRONT K (MV433/08)
001B	4822 443 41334	FRONT K (VR743/75)
001B	4822 443 41336	FRONT K (MV633/08)
001B	4822 443 41352	FRONT K (VR763/93)
002B	4822 443 41333	FRONTPANEL (VR743/75)
002B	4822 443 41345	FRONT PANEL (VR773/93, VR763/55)
002B	4822 443 41351	FRONT PANEL (VR763/93)
002B	4822 443 41348	FRONTPANEL (VR663/56)
002B	4822 443 41344	FRONTPANEL (VR863/56)
004B	4822 403 71098	SHUTTLE BUTTON (SHUTTLE)
007B	4822 450 62192	WINDOW (VR863/56)
007B	4822 450 62191	WINDOW (VR773/93, VR763/55/93)
007B	4822 450 62193	WINDOW (VR663/56)
007B	4822 450 62175	WINDOW (VR743/75)
009B	4822 492 71456	CASS LID SPRING
010B	4822 532 21492	KNOB RING (VR863/56, VR743/75)
011B	4822 459 11186	NAME PLATE (VR863/56)
011B	4822 454 21103	NAME PLATE (VR743/75)
011B	4822 459 11187	NAME PLATE (VR763/55)
011B	4822 459 11189	NAME PLATE (VR773/93, VR763/93)
011B	4822 459 11188	NAME PLATE (VR663/56)
015B	4822 413 41835	SHUTTLE KNOB (VR863/56, VR743/75)
015B	4822 413 41836	SHUTTLE KNOB (MV433/08, MV633)
016B	4822 413 31787	SW KNOB (W/O VR743, MV633/08 and MV433)
030B	4822 443 64094	CASS LID (K) (VR863/56)
030B	4822 443 64107	CASS LID (K) (VR773/93)
030B	4822 443 64093	CASS LID (K) (VR763/55/93)
030B	4822 443 64073	CASS LID (K) (VR743/75)
030B	4822 443 64097	CASS LID (K) (VR663/56)
031B	4822 443 64092	CASS LID (VR863/56)
031B	4822 443 64091	CASS LID (VR773/93, VR763/55/93)
031B	4822 443 64072	CASS LID (VR743/75)
031B	4822 443 64096	CASS LID (VR663/56)

CABINET PARTS

001D	4822 443 30818	TOP COVER
001F	4822 464 51017	FRAME
004F	4822 462 41343	LEG
005F	4822 443 30817	REAR PANEL (VR743/75)
005F	4822 443 64095	REAR PANEL (VR663/56)
005F	4822 443 64089	REAR PANEL (VR863/56, VR763/55/93, VR773/93)
006F	4822 443 64065	CLAMPER (PHILIPS MODEL)
007F	4822 256 92135	HOLDER
014F	4822 443 64068	SOPS CASE
016F	4822 443 64067	SOPS CASE
017F	4822 443 64066	SOPS CASE
018F	4822 443 64069	HEAD AMP CASE (HI-FI)
018F	4822 466 83078	HEAD AMP CASE (MONO)
019F	4822 443 64071	HEAD AMP CASE (HI-FI)
019F	4822 466 83079	HEAD AMP CASE (MONO)
021F	4822 403 53715	BRACKET
026F	4822 492 71476	LEAF SPRING
030F	4822 443 64088	LID BOTTOM
033F	4822 403 71095	EARTH BRACKET
034F	4822 403 71096	EARTH BRACKET
044F	4822 403 71097	FRAME BRACKET

PACKING

001T	4822 736 53729	USER MANUAL (VR863/56)
001T	4822 736 53748	USER MANUAL (MV633/02)
001T	4822 736 53687	USER MANUAL (MV633/16)
001T	4822 736 53686	USER MANUAL (MV633/08)
001T	4822 736 53747	USER MANUAL (MV633/05)
001T	4822 736 53749	USER MANUAL (VR773/93)
001T	4822 736 53728	USER MANUAL (VR763/55)
001T	4822 736 53675	USER MANUAL (VR743/75)
001T	4822 736 53688	USER MANUAL (MV433/08)
001T	4822 736 53731	USER MANUAL (VR663/56)
001T	4822 736 53732	USER MANUAL (VR763/93)
001Z	4822 736 30731	REMOCON (VR743)
001Z	4822 218 30736	REMOCON (VR863, VR773)
001Z	4822 218 30732	REMOCON (MV433, MV633)
001Z	4822 218 30737	REMOCON (VR663, VR763)
004Z	4822 267 31133	JACK AC ADAPTOR (VR863, VR763, VR773, VR663)
004Z	4822 443 64107	CONNECTIVE CORD (MV633)

Tape deck

001M	4822 691 20902	MECHA K (HI-FI)
001M	4822 691 20905	MECHA K (MONO)
002M	4822 214 60118	NETWORK K-MECHA PCB
002N	4822 403 71087	BRACKET HA MOUNT ANGLE(L)
003N	4822 403 71088	BRACKET HA MOUNT ANGLE(R)
004N	4822 290 81643	BRACKET EARTH PLATE UNIT
005N	4822 691 20911	CYLINDER UNIT (HI-FI)
005N	4822 691 20913	CYLINDER UNIT (MONO)
006N	4822 691 20912	UPPER CYLINDER UNIT (HI-FI)
006N	4822 691 20914	UPPER CYLINDER UNIT (MONO)
008N	4822 403 71075	BRACKET CYLINDER HOLDER
009N	4822 466 83074	CYLINDER SHIELD
010N	4822 403 71055	TENSION SPRING ARM
011N	4822 502 21485	CYLINDER UPPER SCREW
012N	4822 403 71061	TENSION ARM (1) UNIT
013N	4822 492 33439	TENSION SPRING
014N	4822 401 11515	BELT TENSION BAND UNIT
015N	4822 528 10896	REEL TABLE UNIT
016N	4822 249 20083	VTR HEAD FE
017N	4822 532 52561	SPACER CUT WASHER
018N	4822 403 71078	MAIN BRAKE UNIT
019N	4822 403 71052	REV ARM
020N	4822 403 71079	MAIN BRAKE UNIT
021N	4833 403 71074	BRACKET MOUNT ANGLE
022N	4822 502 21484	ADJUST SCREW
023N	4822 492 52383	ADJUST SPRING
024N	4822 249 10493	VTR HEAD A/C
025N	4822 403 71077	BRACKET HEAD BASE UNIT
026N	4822 403 71053	LOADING ARM UNIT
027N	4822 462 71988	THRUST SCREW UNIT
028N	4822 532 52559	RUBBER RING OIL SEAL
029N	4822 403 71063	CAP OPENER PIECE
030N	4822 528 81511	PRESSURE ROLLER UNIT
031N	4822 522 33436	PINCH CAM
032N	4822 403 71068	P5 STOPPER BASE
033N	4822 403 71057	P5 ARM UNIT
034N	4822 403 71072	P5 POST STOPPER
035N	4822 273 20379	ROTARY SWITCH MODE
036N	4822 403 71069	RETAINER INCLIND BASE HOLDER
037N	4822 403 71064	SUPPORT INCLIND BASE S UNIT
038N	4822 403 71066	RETAINER ROLLER POST
039N	4822 403 71065	SUPPORT INCLIND BASE T UNIT
040N	4822 403 71066	RETAINER ROLLER POST
041N	4822 403 71071	RETAINER INCLIND ADJ PLATE(S)
042N	4822 522 33438	CONNECTION GEAR
043N	4822 528 10897	TAKE UP REEL UNIT
044N	4822 691 20899	HOUSING UNIT
045N	4822 502 21486	CYLINDER SCREW
046N	4822 403 71073	ROTARY STOPPER
047N	4822 528 81509	SUPPLY ROLLER
048N	4822 532 52557	P4 UPPER LIMITER
049N	4822 532 21491	P4 COLLAR SLEEVE
050N	4822 532 52558	P4 LOWER LIMITER
051N	4822 403 71056	CLEANER ARM UNIT
052N	4822 532 52561	SPACER CUT WASHER
053N	4822 403 71067	RETAINER SS BRAKEUNIT
054N	4822 403 71085	TENSION ROLLER UNIT
055N	4822 522 33437	MAIN CAM GEAR
056N	4822 522 33439	SUB CAM GEAR
057N	4822 522 33441	WARM WHEEL GEAR
058N	4822 522 33443	WARM GEAR
059N	4822 403 71084	LEVER DIRECT
060N	4822 528 30417	CLUTCH DISK
061N	4822 522 33444	TAKE UP REEL GEAR UNIT
062N	4822 522 33442	SUPPLY REEL GEAR
063N	4822 358 31284	TIMING BELT
064N	4822 528 81512	ROTOR UNIT
065N	4822 691 20901	MAGNET STATOR UNIT
066N	4822 403 71058	LOADING ARM(T)(1) UNIT
067N	4822 403 71051	PLAY CONTROL ARM
068N	4822 403 71059	LOADING ARM(S)(1) UNIT
069N	4822 403 71054	PLAY ARM UNIT
070N	4822 249 20084	VTR HEAD FG
071N	4822 443 30815	CHASSIS TOP PLATE
072N	4822 443 30816	CHASSIS HOLDER PLATE
073N	4822 443 41332	RETAINER SIDE PLATE (L) UNIT
074N	4822 403 71083	OPENER LEVER
075N	4822 443 41331	RETAINER SIDE PLATE (R) UNIT
076N	4822 535 93451	MAIN SHAFT UNIT
077N	4822 403 71062	CASSETTE GUIDE
078N	4822 492 71464	EARTH SPRING
079N	4822 535 93452	PIN CASS POSITION FIXTURE
080N	4822 492 71459	FFC SHIELD
081N	4822 273 20381	LOADING MOTOR
082N	4822 403 71076	MOTOR BRACKET
083N	4822 403 71081	HOLDER MAIN LEVER
100N	4822 255 41309	HOLDER LED
101N	4822 255 41308	HOLDER PHOTO TR
102N	4822 276 13474	R.C. SWITCH SAFTY
104N	4822 403 71082	HOLDER REEL GUIDE
105N	4822 417 11208	JOINT CONNECTOR P1503
106N	4822 417 11209	JOINT CONNECTOR P1504
107N	4822 417 11211	JOINT CONNECTOR P1505

Linear Audio

CAPACITORS

C401	4822 122 33795	4700pF (MONO)
C402	4822 124 21894	10µF 16V (MONO)
C403	4822 124 21894	10µF 16V (MONO)
C404	4822 122 40586	0.01µF (MONO)
C405	4822 124 21894	10µF 16V (MONO)
C406	4822 124 21894	10µF 16V (MONO)
C407	4822 122 40586	0.01µF (MONO)
C408	5322 121 42386	0.1µF (MONO)
C409	5322 121 42386	0.1µF (MONO)
C410	4822 124 21894	10µF16V (MONO)
C411	5322 121 42386	0.1µF (MONO)
C412	4822 122 33795	4700pF (MONO)
C413	4822 122 40586	0.01µF (MONO)
C414	4822 126 11726	2200pF (MONO)
C415	4822 124 21894	10µF 16V (MONO)
C416	4822 122 33639	1000pF (MONO)
C417	4822 124 21894	10µF 16V (MONO)
C418	4822 122 31173	220pF
C419	4822 121 43379	0.015µF
C420	4822 124 41139	100µF 16V
C421	4822 122 33639	1000pF
C422	4822 122 40586	0.01µF
C423	4822 122 33639	1000pF
C424	4822 122 31178	680pF (MONO)
C440	4822 122 33795	4700pF (MONO)
C441	4822 122 40586	0.01µF (MONO)

IC

IC41	4822 209 32248	BA7790LS (MONO)

CONNECTORS

J411	4822 265 30809	JACK 6PIN
J412	4822 265 30777	PLUG 3PIN
J420	4822 267 31754	PLUG 11PIN (MONO)

COILS

L401	4822 157 53914	OSC COIL
L402	4822 152 20641	100µH (HI-FI)
L402	4822 157 60444	100µH (MONO)
L406	4822 157 60452	330µH (MONO)
L407	4822 152 20643	10mH (MONO)

TRANSISTOR

Q401	4822 130 60839	2SC2458 (Y OR GR)

RESISTORS

R401	4822 116 52176	10 Ω
R402	4822 116 52274	470 Ω (MONO)
R403	4822 052 10101	100 Ω (MONO)
R404	4822 116 52271	33 kΩ (MONO)
R405	4822 050 11002	1 kΩ (MONO)
R406	4822 116 52283	4.7 kΩ (MONO)
R407	4822 116 52283	4.7 kΩ (MONO)
R408	4822 116 52284	47 kΩ (MONO)
R409	4822 116 52224	470 Ω (MONO)
R410	4822 116 52284	47 kΩ (MONO)
R411	4822 116 52296	6.8 kΩ (MONO)
R412	4822 116 52283	4.7 kΩ (PAL MONO)
R412	4822 116 52256	2.2 kΩ (MULTI MONO)
R413	4822 116 52233	10 kΩ (PAL MONO)
R413	4822 116 52256	2.2 kΩ (MULTI MONO)
R414	4822 116 52284	47 kΩ (MONO)
R416	4822 050 11002	1 kΩ (MONO)
R417	4822 116 52235	1 MΩ (MONO)
R418	4822 116 52256	2.2 kΩ (MONO)
R419	4822 116 52284	47 kΩ (MONO)
R420	4822 116 52233	10 kΩ (MONO)
R421	4822 116 52272	330 kΩ (MONO)
R422	4822 116 52296	6.8 kΩ (MONO)
R423	4822 116 52215	220 Ω (MONO)
R424	4822 116 52284	47 kΩ (MONO)
R425	4822 116 52284	47 kΩ (MONO)
R426	4822 100 11471	100 kΩ TRIMMING
R427	4822 116 52244	15 kΩ
R440	4822 116 52224	470 Ω (MONO)
R441	4822 116 52283	4.7 kΩ (PAL MONO)
R441	4822 050 11002	1 kΩ (MULTI MONO)
R443	4822 116 52283	4.7 kΩ (MONO)

Sync Detector

CAPACITORS

C8V1	4822 122 33639	1000pF
C8V2	5322 122 32335	330pF
C8V3	4822 124 23054	0.47µF 50V
C8V4	4822 124 23053	1µF 50V
C8V5	4822 122 33639	1000pF
C8V6	4822 124 23054	0.47µF 50V
C8V7	4822 124 21894	10µF 16V
C8V8	4822 124 21894	10µF 16V

IC

IC8V	4822 209 61687	LA7210

TRANSISTOR

Q8V1	4822 130 60107	2SA1048 (Y OR GR)

RESISTORS

R8V1	4822 050 11002	1 kΩ
R8V2	4822 050 11002	1 kΩ
R8V3	4822 116 52272	330 kΩ
R8V4	4822 116 52244	15 kΩ
R8V5	4822 116 52297	68 kΩ
R8V6	4822 116 52243	1.5 kΩ
R8V7	4822 116 52243	1.5 kΩ
R8V8	4822 050 11002	1 kΩ
R8V9	4822 116 52233	10 kΩ
R8W1	4822 116 52233	10 kΩ
R8W2	4822 116 52215	220 Ω

X-TAL

X8V1	4822 242 70488	CSB500E5 500KHz

Display control

CAPACITORS

C7D1	4822 122 40588	0.022µF
C7D2	4822 124 41139	100µF 16V
C7D3	4822 124 22047	1000µF 6.3V (HI-FI)
C7D4	4822 122 40586	0.01µF (HI-FI)
C7D5	4822 124 23053	1µF 50V (HI-FI)
C7D6	4822 124 23053	1µF 50V (HI-FI)
C7D7	4822 124 23057	4.7µF 50V (HI-FI)
C7D8	4822 124 23057	4.7µF 50V (HI-FI)
C7D9	5322 122 32311	470pF

DIODES

D7D1	4822 130 32778	1SS133 (PAL)
D7D5	4822 130 32778	1SS133 (VR743, MV633/05/16)
D7D6	4822 130 32778	1SS133 (MV633/05/08/16, MV433)
D7D7	4822 130 32778	1SS133 (NICAM)
D7D8	4822 130 32778	1SS133 (MONO)
D7D9	4822 130 32778	1SS133 (MULTI W/O 2 CARRIER ST)
D7E0	4822 130 32778	1SS133 (CHANAL +)
D7E2	4822 130 32778	1SS133 (CHANAL +)
D7E3	4822 130 32778	1SS133 (VR763/93, VR773)
D7E4	4822 130 32778	1SS133 (VR863, VR663)
D7E5	4822 130 32778	1SS133 (MV633/02/08/16, MV433)
D7E6	4822 130 32778	1SS133 (VR763/93, VR773)
D7E7	4822 130 32778	1SS133 (MULTI)
D7E8	4822 130 83604	L.E.D. SLR-34-MTF42 (MULTI)
D7E9	4822 130 83604	L.E.D. SLR-34-MTF42 (MULTI)
D7F0	4822 130 83604	L.E.D. SLR-34-MTF42 (MULTI)
D7F1	4822 130 83603	L.E.D. SLR-34-VCF42 (MULTI)
D7F2	4822 130 32778	1SS133
D7F3	4822 130 32778	1SS133
D7F4	4822 130 32778	1SS133
D7F5	4822 130 32778	1SS133
D7F6	4822 130 32778	1SS133 (PAL)
D7F7	4822 130 32778	1SS133
D7F8	4822 130 32778	1SS133
D7F9	4822 130 32778	1SS133
D7H0	4822 130 32778	1SS133 (SHUTTLE)
D7H1	4822 130 32778	1SS133 (SHUTTLE)

FL - DISPLAYS

DP7D	4822 130 91304	FIP9AMW9R FL–DISPLAY (HI-FI)

Display control

DP7D	4822 130 91308	FIP7AM9R FL–DISPLAY (MONO)

IC

IC7D	4822 209 33201	BA6810S (HI-FI)

IR - RECEIVER

IR7D	4822 214 52009	GP1U58XP PHOTO UNIT

CONNECTORS

J7D1	4822 265 51319	FFC 36PIN
J7D2	4822 265 30777	PLUG 3PIN
J7D3	4822 265 30777	PLUG 3PIN (HI-FI)
J7E1	4822 265 41364	8PIN (PAL)
J7E1	4822 267 51337	18PIN (MULTI)

COIL

L7D1	4822 157 63638	1mH

TRANSISTORS

Q7D1	4822 130 60766	DTA114ES/UN4111 (MULTI)
Q7D3	4822 130 60766	DTA114ES/UN4111 (MULTI)
Q7D5	4822 130 60588	DTC114ES/UN4211 (MULTI)
Q7D6	4822 130 60766	UN4111 (HI-FI)
Q7D7	4822 130 60766	UN4111 (HI-FI)

RESISTORS

R7D2	4822 116 52219	330 Ω (MULTI)
R7D3	4822 116 52219	330 Ω (MULTI)
R7D4	4822 116 52219	330 Ω (MULTI)
R7D5	4822 116 52219	330 Ω (MULTI)
R7D6	4822 052 10109	10 Ω (HI-FI)
R7D7	4822 116 52234	100 kΩ (HI-FI)
R7D8	4822 116 52284	47 kΩ (HI-FI)
R7D9	4822 116 52234	100 kΩ (HI-FI)
R7E0	4822 116 52234	100 kΩ (HI-FI)
R7E1	4822 116 52234	100 kΩ (HI-FI)
R7E2	4822 116 52234	100 kΩ (HI-FI)
R7E3	4822 116 52234	100 kΩ (HI-FI)
R7E4	4822 116 52234	100 kΩ (HI-FI)
R7E5	4822 116 52234	100 kΩ (HI-FI)
R7E6	4822 116 52234	100 kΩ (HI-FI)
R7E7	4822 116 52234	100 kΩ (HI-FI)
R7E8	4822 116 52234	100 kΩ (HI-FI)
R7E9	4822 116 52243	1.5 kΩ (HI-FI)
R7F1	4822 116 52269	3.3 kΩ (HI-FI)
R7F2	4822 116 52257	22 kΩ (HI-FI)
R7F3	4822 116 52284	47 kΩ (HI-FI)
R7F4	4822 116 52284	47 kΩ (HI-FI)
R7F5	4822 116 52228	680 Ω (HI-FI)
R7F6	4822 100 11373	4.7 kΩ TRIMMING (HI-FI)
R7F7	4822 116 52269	3.3 kΩ (HI-FI)
R7H2	4822 116 52233	10 kΩ (NICAM)
R7H3	4822 116 52234	100 kΩ (HI-FI)
R7H4	4822 116 52234	100 kΩ (HI-FI)
R7H5	4822 052 10109	10 Ω (HI-FI)
R7H5	4822 116 82732	15 Ω (MONO)

SWITCHES

S7D2	4822 276 20508	PUSH SWITCH
S7D3	4822 276 20508	PUSH SWITCH
S7D5	4822 276 20508	PUSH SWITCH
S7D6	4822 276 20508	PUSH SWITCH
S7D7	4822 276 20508	PUSH SWITCH
S7D8	4822 276 20508	PUSH SWITCH
S7D9	4822 276 20508	PUSH SWITCH
S7E0	4822 276 20508	PUSH SWITCH
S7E1	4822 276 20508	PUSH SWITCH
S7E2	4822 276 20508	PUSH SWITCH
S7E5	4822 276 20508	PUSH SWITCH
S7E6	4822 276 20508	PUSH SWITCH
S7F1	4822 276 20508	PUSH SWITCH (SHUTTLE)
S7F2	4822 277 21727	SLIDE SWITCH (NICAM)
S7F3	4822 273 10264	ROTARY SWITCH (SHUTTLE)
S7F4	4822 277 21729	SLIDE SWITCH (MULTI)

CAPACITORS

C201	4822 121 43362	3300pF
C203	4822 124 23056	47µF 16V
C204	4822 122 31178	680pF
C205	4822 124 23772	1µF 50V B. P.
C206	4822 124 80798	3.3µF 50V B. P.
C207	4822 124 80798	3.3µF 50V B. P.
C208	4822 126 11726	2200pF
C209	5322 122 32311	470pF
C210	4822 126 11726	2200pF
C211	4822 124 80087	220µF 6V
C212	4822 122 40588	0.022µF
C213	4822 124 21894	10µF 16V
C214	4822 124 80798	3.3µF 50V B. P.
C215	4822 122 40586	0.01µF
C216	4822 124 23056	47µF 16V
C217	4822 122 33795	4700pF
C218	5322 121 42465	0.068µF
C219	4822 122 10367	150pF
C220	4822 122 10367	150pF
C221	4822 126 10362	22pF
C222	4822 126 10362	22pF
C223	4822 122 40586	0.01µF
C224	4822 124 23056	47µF 16V
C225	4822 122 40589	0.047µF
C226	4822 124 23056	47µF 16V
C228	4822 124 23772	1µF 50V B. P.
C229	5322 121 42386	0.1µF
C230	4822 121 42868	0.22µF
C231	5322 121 42386	0.1µF
C232	4822 122 40586	0.01µF
C234	5322 122 32265	100pF
C235	4822 124 23056	47µF 16V
C237	4822 122 40586	0.01µF
C238	4822 122 40586	0.01µF
C239	4822 124 21894	10µF 16V (MULTI)
C240	4822 122 40586	0.01µF
C241	4822 122 40586	0.01µF
C242	4822 122 40586	0.01µF
C243	4822 124 23053	1µF 50V
C244	4822 122 40586	0.01µF
C245	4822 124 21894	10µF 16V
C246	5322 122 32265	100pF
C247	5322 122 32265	100pF
C248	5322 122 32265	100pF
C249	4822 122 40586	0.01µF
C250	4822 124 21894	10µF 16V
C251	5322 122 32265	100pF
C252	5322 122 32265	100pF
C253	5322 122 32265	100pF
C601	4822 124 80798	3.3µF 50V B. P.
C602	4822 124 80798	3.3µF 50V B. P.
C603	4822 122 40589	0.047µF
C604	4822 122 40589	0.047µF
C605	4822 122 40589	0.047µF
C606	4822 122 40589	0.047µF
C607	4822 122 40589	0.047µF
C608	4822 122 40589	0.047µF
C609	4822 122 40589	0.047µF
C610	4822 122 40586	0.01µF
C611	4822 124 80087	220µF 6V
C612	4822 121 42868	0.22µF
C614	4822 124 23053	1µF 50V
C615	4822 124 23056	47µF 16V
C616	4822 124 80798	3.3µF 50V B. P.
C617	4822 124 41139	100µF 16V
C619	4822 122 40588	0.022µF
C621	5322 121 42386	0.1µF
C622	5322 121 42386	0.1µF
C623	5322 121 42386	0.1µF
C624	4822 122 40586	0.01µF
C625	4822 124 23056	47µF 16V
C626	4822 122 40589	0.047µF (MONO)
C627	4822 124 41139	100µF 16V (MONO)
C628	4822 124 23054	0.47µF 50V
C629	5322 121 42386	0.1µF (MONO)
C630	5322 121 42386	0.1µF (MONO)
C631	4822 124 23772	1µF 50V B. P.
C632	4822 126 10363	68pF
C633	4822 124 23772	1µF 50V B. P.
C634	4822 126 10363	68pF
C636	4822 124 80798	3.3µF 50V B. P. (MONO)
C637	4822 124 80798	3.3µF 50V B. P. (MONO)
C638	4822 124 23057	4.7µF 50V
C639	5322 121 42386	0.1µF (MONO)
C640	5322 121 42386	0.1µF (MONO)
C641	4822 124 80087	220µF 6V
C642	5322 121 42386	0.1µF (MONO)
C643	4822 124 80798	3.3µF 50V B. P. (MONO)
C652	4822 124 21894	10µF 16V
C681	4822 124 23056	47µF 16V
C684	5322 121 42386	0.1µF
C685	5322 121 42386	0.1µF

DIODES

D201	4822 130 32778	1SS133
D202	4822 130 32778	1SS133
D203	4822 130 32778	1SS133 (MULTI)
D205	4822 130 32778	1SS133
D206	4822 130 32778	1SS133
D207	4822 130 32778	1SS133
D208	4822 130 32778	1SS133
D209	4822 130 32778	1SS133

Logic - Servo

D210	4822 130 32778	1SS133
D211	4822 130 32778	1SS133 (MULTI)
D212	4822 130 32778	1SS133 (MULTI)
D213	4822 130 32778	1SS133 (MULTI)
D214	4822 130 32778	1SS133 (MULTI)
D215	4822 130 32778	1SS133 (MULTI)
D216	4822 130 32778	1SS133 (MULTI)
D217	4822 130 32778	1SS133 (MULTI)
D218	4822 130 32778	1SS133 (MULTI)
D219	4822 130 32778	1SS133 (MULTI)
D221	4822 116 52271	33 kΩ (PAL)
D222	4822 130 32778	1SS133 (MULTI)
D621	4822 130 32778	1SS133
D622	4822 130 32778	1SS133
D623	4822 130 32778	1SS133
D624	4822 130 32778	1SS133
D631	4822 130 32778	1SS133
D632	4822 130 32778	1SS133
D633	4822 130 32778	1SS133
D634	4822 130 32778	1SS133
D681	4822 130 32778	1SS133

IC's

IC21	4822 209 33025	MN67434 SERVO
IC23	4822 209 33024	TC9173P
IC24	4822 209 61704	TC9174P
IC61	4822 209 33022	BA6439P
IC62	4822 209 61188	BA6219
IC63	4822 209 83679	NJM2904 DUAL OP-AMP
IC64	4822 209 83679	NJM2904 DUAL OP-AMP
IC65	4822 209 60048	AN3814K (MONO)

CONNECTORS

J201	4822 265 30669	PLUG 5PIN (HI-FI)
J202	4822 267 31753	PLUG 10PIN (MONO)
J601	4822 267 31628	PLUG 9PIN
J602	4822 265 30777	PLUG 3PIN
J603	4822 265 41179	13PIN
J604	4822 265 41362	15PIN
J605	4822 265 61272	FFC 34PIN
J608	4822 265 61275	HLEM40S-1 40PIN
J609	4822 267 31742	PLUG 16PIN
J610	4822 267 31743	PLUG 20PIN

COILS

L201	4822 157 60446	33µH
L202	4822 157 60444	100µH
L203	4822 157 60444	100µH
L601	4822 157 63638	1mH
L602	4822 157 60446	33µH

TRANSISTORS

Q201	4822 130 60839	2SC2458 (Y OR GR) (MULTI)
Q202	4822 130 60588	UN4211/DTC114ES
Q203	4822 130 60588	UN4211/DTC114ES
Q204	4822 130 60107	2SA1048 (Y OR GR)
Q206	4822 130 42594	DTC144ES/UN4213 (HI-FI)
Q207	4822 130 60107	2SA1048 (Y OR GR)
Q208	4822 130 42682	UN4113
Q209	4822 130 42682	UN4113
Q210	4822 130 60839	2SC2458 (Y OR R)
Q211	4822 130 42682	UN4113
Q212	4822 130 60839	2SC2458 (Y OR R)
Q213	4822 130 42682	UN4113
Q214	4822 130 42594	DTC144ES/UN4213
Q215	4822 130 61474	2SD592 R TR.
Q216	4822 130 60839	2SC2458 (Y OR GR)
Q218	4822 130 60107	2SA1048 (Y OR GR) (MULTI)
Q219	4822 130 42594	DTC144ES/UN4213 (MULTI)
Q601	4822 130 60588	UN4211/DTC114ES
Q602	4822 130 60588	UN4211/DTC114ES
Q651	4822 130 61439	2SB1237 (R)
Q682	4822 130 60588	UN4211/DTC114ES
Q683	4822 130 63517	DTB123YS
Q684	4822 130 60107	2SA1048 (Y OR GR)
Q685	4822 130 42594	DTC144ES/UN4213
Q686	4822 130 60766	UN4111

RESISTORS

R201	4822 116 52258	220 kΩ
R202	4822 116 52234	100 kΩ
R203	4822 050 11002	1 kΩ
R204	4822 050 11002	1 kΩ
R205	4822 050 11002	1 kΩ
R206	4822 050 11002	1 kΩ
R207	4822 116 52175	100 Ω
R208	4822 050 11002	1 kΩ
R209	4822 116 52233	10 kΩ
R210	4822 116 52297	68 kΩ
R211	4822 116 52234	100 kΩ
R213	4822 116 52256	2.2 kΩ
R214	4822 116 52256	2.2 kΩ
R215	4822 116 52175	100 Ω (MULTI)
R216	4822 050 11002	1 kΩ (MULTI)
R217	4822 116 52283	4.7 kΩ (MULTI)
R220	4822 050 11002	1 kΩ
R221	4822 050 11002	1 kΩ
R222	4822 050 11002	1 kΩ
R223	4822 116 52297	68 kΩ
R227	4822 116 52283	4.7 kΩ
R229	4822 116 52284	100 kΩ
R230	4822 116 52284	47 kΩ

Logic - Servo

R231	4822 116 52257	22 kΩ
R232	4822 116 52257	22 kΩ
R233	4822 116 52296	6.8 kΩ
R234	4822 116 52215	220 Ω
R235	4822 116 52233	10 kΩ
R236	4822 116 52256	2.2 kΩ
R237	4822 100 11372	47 kΩ TRIMMING
R238	4822 116 52256	2.2 kΩ
R239	4822 116 52256	2.2 kΩ
R240	4822 116 52283	4.7 kΩ
R241	4822 116 52257	22 kΩ
R242	4822 116 52215	220 Ω
R243	4822 116 52269	3.3 kΩ
R245	4822 116 52215	220 Ω
R246	4822 116 52256	2.2 kΩ
R247	4822 116 52257	22 kΩ
R248	4822 116 52233	10 kΩ
R249	4822 116 52233	10 kΩ
R250	4822 116 52283	4.7 kΩ
R251	4822 116 52283	4.7 kΩ
R252	4822 116 52271	33 kΩ (W/O VR663)
R255	4822 116 52283	4.7 kΩ
R256	4822 116 52243	1.5 kΩ
R257	4822 116 52256	2.2 kΩ
R258	4822 116 52284	47 kΩ
R259	4822 116 52284	47 kΩ
R260	4822 100 11471	100 kΩ TRIMMING
R261	4822 100 11471	100 kΩ TRIMMING
R262	4822 100 11471	100 kΩ TRIMMING
R263	4822 100 11471	100 kΩ TRIMMING
R268	4822 116 52283	4.7 kΩ
R269	4822 116 52284	47 kΩ
R270	4822 116 52175	100 Ω
R271	4822 116 52175	100 Ω
R272	4822 116 52175	100 Ω
R273	4822 116 52175	100 Ω
R274	4822 116 52175	100 Ω
R275	4822 116 52175	100 Ω
R276	4822 050 11002	1 kΩ (MULTI)
R277	4822 050 11002	1 kΩ (MULTI)
R279	4822 050 11002	1 kΩ
R280	4822 050 11002	1 kΩ
R281	4822 050 11002	1 kΩ
R282	4822 050 11002	1 kΩ
R283	4822 050 11002	1 kΩ
R284	4822 050 11002	1 kΩ
R288	4822 050 11002	1 kΩ
R289	4822 050 11002	1 kΩ (W/O VR743)
R290	4822 050 11002	1 kΩ
R291	4822 050 11002	1 kΩ
R292	4822 050 11002	1 kΩ
R294	4822 050 11002	470 Ω (MULTI)
R295	4822 050 11002	1 kΩ (MULTI)
R296	4822 116 52234	100 kΩ
R299	4822 050 11002	1 kΩ (CHANAL +)
R601	4822 116 52195	47 Ω
R602	4822 116 52195	47 Ω
R603	4822 050 11002	1 kΩ
R604	4822 116 52235	1M Ω
R605	4822 116 52231	12 kΩ
R607	4822 116 52256	2.2 kΩ
R608	4822 116 52284	47 kΩ
R609	4822 116 52283	4.7 kΩ
R610	4822 116 52284	47 kΩ
R611	4822 116 52298	680 kΩ
R612	4822 116 52233	10 kΩ
R613	4822 050 11002	1 kΩ
R614	4822 117 10821	560 Ω
R615	4822 116 52256	2.2 kΩ
R616	4822 050 11002	1 kΩ
R617	4822 117 10822	0.56 Ω
R618	4822 116 52195	47 Ω
R619	4822 116 52228	680 Ω
R620	4822 116 52224	470 Ω
R621	4822 117 10818	1.8 Ω
R622	4822 116 52296	6.8 kΩ
R623	4822 116 52233	10 kΩ
R624	4822 116 52298	680 kΩ
R625	4822 116 52233	10 kΩ
R626	4822 116 52283	4.7 kΩ
R627	4822 050 11002	1 kΩ
R628	4822 050 11002	1 kΩ
R629	4822 116 52269	3.3 kΩ
R630	4822 116 52215	220 Ω
R631	4822 116 52283	4.7 kΩ
R632	4822 116 52235	1 MΩ
R633	4822 116 52235	1 MΩ
R634	4822 116 52283	4.7 kΩ
R635	4822 116 52269	3.3 kΩ
R636	4822 116 52257	22 kΩ
R637	4822 116 52257	22 kΩ
R638	4822 116 52269	3.3 kΩ
R641	4822 116 52257	22 kΩ
R642	4822 116 52271	33 kΩ
R643	4822 116 52271	33 kΩ
R644	4822 116 52271	33 kΩ
R645	4822 116 52257	22 kΩ
R646	4822 116 52215	220 Ω
R651	4822 050 11002	1 kΩ
R652	4822 050 11002	1 kΩ
R654	4822 116 52195	47 Ω (MONO)
R655	4822 116 52195	47 Ω (MONO)
R656	4822 116 52195	47 Ω (MONO)
R657	4822 116 52195	47 Ω (MONO)

Logic - Servo

R658	4822 116 52195	47 Ω (MONO)
R659	4822 116 52195	47 Ω (MONO)
R660	4822 117 10222	0.68 Ω 1/2W (MONO)
R661	4822 116 52269	3.3 kΩ
R662	4822 050 11002	1 kΩ (MONO)
R681	4822 116 52243	1.5 kΩ
R682	4822 116 52269	3.3 kΩ
R6A0	4822 116 52244	15 kΩ (MULTI)
R6A1	4822 116 52175	100 Ω (MULTI)
R6A2	4822 116 52271	33 kΩ (MULTI)
R6A3	4822 116 52233	10 kΩ (MULTI)
R6A4	4822 116 52284	47 kΩ (MULTI)
R6A5	4822 116 52233	10 kΩ (MULTI)
R6A6	4822 116 52283	4.7 kΩ (MULTI)
R6A7	4822 116 52283	4.7 kΩ (MULTI)
R6A8	4822 116 52233	10 kΩ (MULTI)
R6A9	4822 116 52284	47 kΩ (MULTI)
U613	4822 116 52233	10 kΩ (VR663)

SWITCHES

S601	4822 277 21566	SLIDE SWITCH (NICAM)
S602	4822 277 21385	SLIDE SWITCH (MULTI)

X-TAL

X201	4822 242 81652	7.15909MHZ

Equalizer

CAPACITORS

C3E1	4822 124 23056	47µF 16V
C3E2	4822 126 10513	47pF
C3E3	4822 122 10367	150pF (MULTI)
C3E4	4822 126 10363	68pF
C3E5	4822 126 10363	68pF
C3E6	4822 122 33792	10pF
C3E7	4822 122 31178	680pF
C3E8	4822 126 13089	33pF
C3E9	4822 122 33792	10pF (W/O VR743)
C3F0	4822 126 10362	22pF
C3F2	4822 122 40586	0.01µF
C3F3	4822 124 23056	47µF 16V
C3F4	4822 122 40588	0.022µF
C3F5	4822 122 40588	0.022µF
C8E1	4822 121 42868	0.22µF
C8E2	4822 126 10363	68pF
C8E3	4822 122 32335	330pF
C8E4	4822 126 10363	68pF
C8E5	4822 122 40588	0.022µF
C8E6	4822 122 40586	0.01µF
C8E7	4822 122 40586	0.01µF
C8F0	4822 122 40586	0.01µF
C8F2	4822 122 40588	0.022µF

DIODE

D8E1	4822 130 32778	1SS133

CONNECTOR

J301	4822 265 41179	FFC 13PIN CONNECTOR

COILS

L3E1	4822 157 60446	33µH
L3E2	4822 157 60449	150µH (MULTI)
L3E3	4822 157 60445	15µH
L3E4	4822 157 60444	100µH
L3E5	4822 157 60445	15µH
L3E6	4822 157 60444	100µH
L8E1	4822 157 63638	1mH
L8E2	4822 157 60451	220µH
L8E3	4822 157 60451	220µH

TRANSISTORS

Q3E1	4822 130 60839	2SC2458 (Y OR GR)
Q3E2	4822 130 61486	2SC2058S (P OR Q)
Q3E3	4822 130 60588	UN4113
Q3E4	4822 130 60588	UN4113 (W/O VR743)
Q3E5	4822 130 60588	UN4113 (W/O VR743)

Equalizer

Q3E6	4822 130 60839	2SC2458 (Y OR GR)
Q8E1	4822 130 60839	2SC2458 (Y OR GR)
Q8E2	4822 130 60839	2SC2458 (Y OR GR)

RESISTORS

R3E1	4822 116 52228	680 Ω
R3E2	4822 116 52228	680 Ω
R3E3	4822 116 52228	680 Ω
R3E4	4822 050 11002	1 kΩ
R3E5	4822 116 52228	680 Ω
R3E6	4822 116 52175	100 Ω
R3E7	4822 116 52215	220 Ω
R3E8	4822 116 52283	4.7 kΩ
R3E9	4822 116 52283	4.7 kΩ
R3F0	4822 050 11002	1 kΩ
R3F1	4822 050 11002	1 kΩ
R3F2	4822 050 11002	1 kΩ
R3F3	4822 050 11002	1 kΩ
R8E1	4822 050 11002	1 kΩ
R8E2	4822 116 52296	6.8 kΩ
R8E3	4822 116 52243	1.5 kΩ
R8E4	4822 050 11002	1 kΩ
R8E5	4822 116 52211	150 Ω
R8E6	4822 050 11002	1 kΩ

Front End

CAPACITORS

C702	5322 121 42386	0.1µF (W/O MV433)
C702	4822 124 23054	0.47µF 50V (MV433)
C703	4822 122 40586	0.01µF
C705	4822 122 40586	0.01µF
C706	4822 124 23053	1µF 50V
C707	4822 124 23053	1µF 50V
C708	4822 122 40589	0.047µF
C709	4822 122 40586	0.01µF
C710	4822 124 21894	10µF 16V
C711	5322 122 32265	100PF
C712	5322 122 32265	100PF
C713	5322 122 32265	100PF
C714	4822 122 33795	4700PF (VR663)
C714	4822 122 40588	0.022µF (HI-FI)
C715	4822 122 33795	4700PF (VR663)
C716	4822 122 33795	4700PF (VR663)
C716	4822 122 40586	0.01µF (MULTI HI-FI)
C717	4822 122 33639	1000pF (VR663)
C718	4822 124 21894	10µF 16V (MULTI)
C719	4822 124 21894	10µF 16V (MULTI)
C720	4822 124 21894	10µF 16V (MULTI)
C721	4822 124 21894	10µF 16V (VR663)
C722	4822 124 21894	10µF 16V (VR663)
C725	4822 124 21894	10µF 16V
C732	4822 122 40586	0.01µF (MULTI)
C734	4822 122 40586	0.01µF (2 CARRIER ST)
C735	4822 122 40586	0.01µF (2 CARRIER ST)
C741	4822 124 23773	10µF 16V (HI-FI)
C742	4822 124 23773	10µF 16V (MULTI HI-FI)

IC

IC71	4822 209 60079	LA7222 ANALOG (MULTI)

COILS

L701	4822 157 62252	22µH
L703	4822 157 62252	22µH
L704	4822 157 62252	22µH
L705	4822 157 62252	22µH

TRANSISTORS

Q701	4822 130 61486	2SC2058S (P OR Q) (2 CARRIER ST)
Q702	4822 130 60839	2SC2458 (Y OY GR) (W/O MV433)
Q703	4822 209 62761	NJM-7809
Q707	4822 130 60839	2SC2458 (Y OY GR) (W/O MV433)

Front End

RESISTORS

R701	4822 116 52272	330 kΩ (W/O MV433)
R701	4822 116 52257	22 kΩ (MV433)
R702	4822 116 52285	470 kΩ (W/O MV433)
R702	4822 116 52284	47 kΩ (MV433)
R704	4822 116 52175	100 Ω
R705	4822 116 52175	100 Ω
R706	4822 116 52175	100 Ω
R707	4822 116 52283	4.7 kΩ
R708	4822 116 52283	4.7 kΩ
R709	4822 116 52283	4.7 kΩ
R710	4822 116 52296	6.8 kΩ (HI-FI)
R710	4822 116 52283	4.7 kΩ (VR663)
R711	4822 116 52284	47 kΩ (HI-FI)
R712	4822 116 52233	10 kΩ (W/O MV433)
R713	4822 116 52871	33 kΩ (MULTI MONO)
R713	4822 116 52284	47 kΩ (MULTI HI-FI)
R718	4822 052 10101	100 Ω (MULTI)
R720	4822 116 52257	22 kΩ (NICAM W/O 2 CARRIER ST)
R721	4822 116 52871	33 kΩ (NICAM W/O 2 CARRIER ST)
R722	4822 116 52233	10 kΩ (NICAM W/O 2 CARRIER ST)
R723	4822 116 52283	4.7 kΩ (HI-FI)
R724	4822 116 52283	4.7 kΩ (HI-FI)
R731	4822 116 52819	330 Ω (2 CARRIER ST)
R732	4822 050 11002	1 kΩ (2 CARRIER ST)
R733	4822 116 52195	47 Ω (2 CARRIER ST)
R734	4822 116 52269	3.3 kΩ (2 CARRIER ST)
R735	4822 116 52175	100 Ω (2 CARRIER ST)
R736	4822 116 52257	22 kΩ (W/O MV433)
R737	4822 116 52234	100 kΩ (VR743)
R738	4822 116 52234	100 kΩ (VR743)
R740	4822 116 52283	4.7 kΩ
R789	4822 116 52233	10 kΩ (MULTI)

TUNERS

E701	4822 210 10539	TBMZ4-005A (MULTI)
E701	4822 210 10528	TBMS4-001A (VR743)
E701	4822 210 10527	TBME4-009A (MV633/02/08)
E701		TBMB3-003A (MV633/05)
E701	4822 214 60121	TBMZ4-012A (MV633/16)
E701	4822 214 60119	TBME3-002A (MV433)

2 Carrier ST

CAPACITORS

C901	4822 122 40586	0.01μF
C902	4822 122 40586	0.01μF
C903	4822 124 21894	10μF 16V
C904	4822 122 40586	0.01μF
C905	4822 126 10362	22PF 50V
C906	4822 122 33639	1000PF
C907	4822 124 23053	1μF 50V
C908	5322 122 32265	100PF 50V
C909	5322 122 32265	100PF 50V
C910	4822 122 33639	1000PF
C911	4822 124 23053	1μF 50V
C912	4822 124 23053	1μF 50V
C913	4822 122 40589	0.047μF 50V
C914	4822 122 40589	0.047μF 50V
C915	4822 124 23053	1μF 50V
C916	4822 124 21894	10μF 16V
C917	4822 122 40586	0.01μF
C918	4822 121 42868	0.22μF 50V

FILTERS

FL91	4822 242 73547	SFE5.74MC2 5.74MHz BPF
FL92	4822 242 73547	SFE5.74MC2 5.74MHz BPF
FL93	4822 242 73548	TPS5.74MB2 5.74MHz TRAP

IC's

IC91	4822 209 62175	TA7337P
IC92	4822 209 63967	TDA8415

CONNECTOR

J901	4822 267 31741	PLUG 9PIN

COILS

L901	4822 157 62252	22mH
L902	4822 156 21569	5.74MHz LLD COIL
L903	4822 157 60445	15mH ±5%
L904	4822 157 62252	22mH ±5%

RESISTORS

R901	4822 050 11002	1 kΩ
R902	4822 116 52269	3.3 kΩ
R903	4822 050 11002	1 k Ω
R904	4822 116 52233	10kΩ
R905	4822 116 52283	4.7 kΩ
R906	4822 116 52175	100 Ω
R907	4822 116 52175	100 Ω
R908	4822 100 20451	47 kΩ TRIMMING
R909	4822 116 52244	15 kΩ (W/O MV633/08)

2 Carrier ST

R910	4822 116 52244	15 kΩ (W/O MV633/08)
R911	4822 116 52271	33 kΩ (VR863, VR763/55)
R911	4822 116 52284	47 kΩ (VR743)
R911	4822 116 52257	22 kΩ (MV633/02/16)
R911	4822 116 52296	6.8 kΩ (MV633/08)
R912	4822 116 52271	33 kΩ (VR863, VR763/55)
R912	4822 116 52284	47 kΩ (VR743)
R912	4822 116 52257	22 kΩ (MV633/02/16)
R912	4822 116 52296	6.8 kΩ (MV633/08)

X-TAL

X901	4822 242 73551	AT-49 10MHz

HI-FI Audio (HI-FI)

CAPACITORS

C509	4822 124 21894	10µF 16V
C510	4822 124 21894	10µF 16V
C511	4822 124 23057	4.7µF 50V
C512	4822 122 32701	0.022µF
C513	4822 124 23056	47µF 16V
C514	5322 122 34098	0.01µF
C515	4822 122 33891	3300pF
C516	5322 122 34099	470pF
C517	4822 126 10147	680pF
C518	5322 122 34099	470pF
C519	4822 124 23057	4.7µF 50V
C520	4822 124 21894	10µF 16V
C521	4822 122 33714	0.1µF
C522	4822 122 32843	0.22µF
C523	5322 122 34098	0.01µF
C524	4822 124 23053	1µF 50V
C525	5322 126 10511	1000pF
C526	4822 122 33714	0.1µF
C527	4822 124 21894	10µF 16V
C528	4822 124 23057	4.7µF 50V
C529	5322 122 34099	470pF
C530	4822 126 10147	680pF
C531	5322 122 34099	470pF
C532	4822 122 33891	3300pF
C533	5322 122 34098	0.01µF
C534	4822 124 23056	47µF 16V
C535	4822 122 32701	0.022µF
C536	4822 124 23057	4.7µF 50V
C537	4822 124 21894	10µF 16V
C538	4822 124 21894	10µF 16V
C539	4822 124 21894	10µF 16V
C540	5322 126 10223	4700pF
C541	4822 124 21894	10µF 16V
C542	4822 124 21894	10µF 16V
C543	4822 122 33127	2200pF
C544	5322 122 34098	0.01µF
C545	5322 126 10511	1000pF
C546	5322 126 10511	1000pF
C547	4822 126 10147	680pF
C548	5322 126 10223	4700pF
C549	5322 122 34098	0.01µF
C551	5322 126 10511	1000pF
C552	4822 124 23057	4.7µF 50V
C553	4822 124 23057	4.7µF 50V
C554	4822 124 21894	10µF 16V
C555	4822 124 21894	10µF 16V
C556	4822 124 21894	10µF 16V
C5A2	4822 124 21894	10µF 16V
C5A3	4822 124 21894	10µF 16V
C5A4	4822 124 21894	10µF 16V
C5A5	4822 124 21894	10µF 16V

HI-FI Audio (HI-FI)

C5C3	4822 124 41139	100µF 16V
C5C8	4822 124 23056	47µF 16V
C5F1	4822 124 21894	10µF 16V
C5F2	4822 124 21894	10µF 16V
C5F3	4822 124 23053	1µF 50V
C5F4	4822 124 41139	100µF 16V
C5F5	4822 124 41139	100µF 16V

DIODES

D501	4822 130 81166	1SS184 CHIP
D5A1	4822 130 32778	1SS133
D5A2	4822 130 32778	1SS133
D5A3	4822 130 32778	1SS133

IC's

IC51	4822 209 32249	BH7771KS HIFI AUDIO
IC53	4822 209 63132	BA7755A

CONNECTORS

J501	4822 267 70326	PLUG
J502	4822 265 31076	FFC 4PIN
J503	4822 265 61271	FFC 34PIN (ALL MODEL)
J504	4822 265 30669	PLUG 5PIN
J505	4822 265 30777	PLUG 3PIN
J506	4822 265 51287	20PIN (ALL MODEL)
J508	4822 265 30777	PLUG 3PIN (MONO)
J5F1	4822 267 31741	PLUG 9PIN

COILS

L501	4822 157 62252	22µH
L502	4822 157 62252	22µH
L503	4822 152 20643	10mH

TRANSISTORS

Q501	4822 130 60107	2SA1048 (Y OR GR) (W/O VR743)
Q502	4822 130 60107	2SA1048 (Y OR GR) (W/O VR743)
Q5A1	4822 130 42594	DTC144ES / UN4213
Q5A3	4822 130 61886	2SD1292 (Q OR R)
Q5A4	4822 130 63242	2SB810 RANK FL & EL
Q5A5	4822 130 60839	2SC2458 (Y OR GR)
Q5A6	4822 130 60839	2SC2458 (Y OR GR)
Q5F1	4822 130 60839	2SC2458 (Y OR GR)
Q5F2	4822 130 60839	2SC2458 (Y OR GR)
Q5F3	4822 130 42594	DTC144ES/UN4213
Q5F4	4822 130 42594	DTC144ES/UN4213

RESISTORS

R501	4822 051 30105	1 MΩ
R502	4822 051 30105	1 MΩ
R503	4822 051 30224	220 kΩ
R504	4822 051 30103	10 kΩ
R505	4822 051 30333	33 kΩ
R506	4822 051 30103	10 kΩ
R507	4822 100 11792	50 kΩ TRIMMING
R508	4822 100 11788	100 kΩ TRIMMING (W/O VR743)
R509	4822 100 11792	50 kΩ TRIMMING
R510	4822 051 30103	10 kΩ (W/O VR743)
R511	4822 051 30103	10 kΩ (W/O VR743)
R512	4822 116 82487	0 Ω
R513	4822 051 30153	15 kΩ
R514	4822 051 30222	2.2 kΩ
R515	4822 051 30471	470 Ω
R516	4822 051 30334	330 kΩ
R517	4822 051 30153	15 kΩ
R518	4822 051 30682	6.8 kΩ
R519	4822 051 30333	33 kΩ
R520	4822 051 30103	10 kΩ
R521	4822 051 30333	33 kΩ
R522	4822 051 30103	10 kΩ
R523	4822 100 11801	10 kΩ ±25% 1/10W TRIMMING
R524	4822 100 11792	50 kΩ TRIMMING (W/O VR743)
R525	4822 051 30223	22 kΩ
R526	4822 051 30103	10 kΩ (W/O VR743)
R527	4822 051 30103	10 kΩ (W/O VR743)
R528	4822 051 30224	220 kΩ
R529	4822 051 30103	10 kΩ
R530	4822 051 30103	10 kΩ
R531	4822 051 30105	1 MΩ
R532	4822 051 30105	1 MΩ
R533	4822 051 30332	3.3 kΩ
R534	4822 051 30103	10 kΩ
R535	4822 051 30222	2.2 kΩ
R536	4822 051 30473	47 kΩ
R537	4822 051 30103	10 kΩ
R538	4822 051 30682	6.8 kΩ
R539	4822 051 30331	330 Ω
R540	4822 051 30334	330 kΩ
R541	4822 051 30473	47 kΩ
R542	4822 051 30471	470 Ω
R543	4822 051 30471	470 Ω
R545	4822 051 30152	1.5 kΩ
R546	4822 051 30153	15 kΩ
R547	4822 051 30473	47 kΩ
R548	4822 051 30682	6.8 kΩ
R549	4822 051 30103	10 kΩ

HI-FI Audio (HI-FI)

R550	4822 051 30102	1 kΩ
R551	4822 051 30103	10 kΩ
R552	4822 051 30103	10 kΩ
R553	4822 051 30105	1 MΩ
R554	4822 051 30105	1 MΩ
R555	4822 051 30151	150 Ω
R556	4822 051 30473	47 kΩ
R557	4822 116 82487	0 Ω
R558	4822 116 82487	0 Ω
R559	4822 116 82487	0 Ω (MULTI)
R5C4	4822 050 11002	1 kΩ
R5D0	4822 116 52271	33 kΩ
R5D3	4822 116 52271	33 kΩ
R5D4	4822 052 10101	100 Ω
R5D5	4822 116 52271	33 kΩ
R5D6	4822 116 52269	3.3 kΩ
R5D7	4822 116 51086	22 Ω 2W
R5D8	4822 053 11561	560 Ω 2W
R5D9	4822 116 52269	3.3 kΩ
R5E2	4822 050 11002	1 kΩ
R5E3	4822 050 11002	1 kΩ
R5E5	4822 052 10101	100 Ω
R5E6	4822 052 10101	100 Ω
R5F1	4822 050 11002	1 kΩ
R5F2	4822 116 52224	470 Ω
R5F4	4822 116 52228	680 Ω
R5F5	4822 050 11002	1 kΩ
R5F6	4822 116 52228	680 Ω
R5F8	4822 116 52224	470 Ω
R5F9	4822 116 52233	10 Ω

Head Amplifier (MONO)

CAPACITORS

C3H1	4822 122 40588	0.022μF
C3H2	4822 122 33639	1000pF
C3H3	4822 124 21894	10μF 16V
C3H4	4822 122 40589	0.047μF
C3H5	4822 126 10362	22pF
C3H6	4822 122 40589	0.047μF
C3H7	4822 126 10362	22pF
C3H8	4822 124 21894	10μF 16V
C3H9	4822 124 21894	10μF 16V
C3J0	4822 122 40589	0.047μF
C3J1	4822 126 10513	47pF
C3J2	4822 122 40589	0.047μF
C3J3	4822 126 10513	47pF
C3J4	4822 124 21894	10μF 16V
C3J5	4822 122 33639	1000pF
C3J6	4822 126 13089	33pF
C3J7	4822 126 13089	33pF
C3J8	4822 124 23053	1μF 50V
C3J9	4822 122 40589	0.047μF
C3K0	4822 122 40586	0.01μF
C3K1	4822 122 40586	0.01μF
C3K2	4822 122 40586	0.01μF
C3K3	4822 124 23056	47μF 16V
C3K4	4822 122 40586	0.01μF
C3K5	4822 124 23056	47μF 16V
C3K6	4822 122 40586	0.01μF
C3K7	4822 122 33639	1000pF
C3K9	4822 122 40586	0.01μF
C3L0	4822 124 23053	1μF 50V
C3L1	4822 126 10363	68pF
C3L3	4822 126 10363	68pF
C3L4	5322 122 32311	470pF
C3L6	4822 122 10367	150pF

IC

IC38	4822 209 30648	BA7274S HEAD AMP IC

CONNECTORS

J3H1	4822 267 50879	8PIN CONNECTOR
J3H2	4822 265 41294	FFC 13PIN

COILS

L3H1	4822 157 60444	100μH
L3H2	4822 157 60444	100μH
L3H3	4822 157 60444	100μH
L3H4	4822 157 60454	68μH
L3H5	4822 157 60451	220μH

Head Amplifier (MONO)

RESISTORS

R3H1	4822 116 52228	680 Ω
R3H2	4822 116 52228	680 Ω
R3H3	4822 116 52228	680 Ω
R3H4	4822 116 52228	680 Ω
R3H5	4822 116 52224	470 Ω
R3H6	4822 116 52224	470 Ω
R3H7	4822 116 52195	47 Ω
R3H8	4822 116 52195	47 Ω
R3H9	4822 116 52258	220 kΩ
R3J0	4822 116 52257	22 kΩ
R3J1	4822 116 52243	1.5 kΩ
R3J2	4822 116 52243	1.5 kΩ
R3J3	4822 116 52228	680 Ω
R3J4	4822 116 11002	1 kΩ
R3J5	4822 116 52243	1.5 kΩ
R3J6	4822 116 52256	2.2 kΩ
R3J7	4822 116 52256	2.2 kΩ
R3J9	4822 116 52233	10 kΩ
R3K0	4822 116 52243	1.5 kΩ
R3K1	4822 116 52219	330 Ω

Head Amplifier (HI-FI)

CAPACITORS

C8H1	4822 122 40588	0.022μF
C8H2	4822 122 33639	1000pF
C8H3	4822 124 21894	10μF 16V
C8H4	4822 122 40589	0.047μF
C8H5	4822 126 10362	22pF
C8H6	4822 122 40589	0.047μF
C8H7	4822 126 10362	22pF
C8H8	4822 124 21894	10μF 16V
C8H9	4822 124 21894	10μF 16V
C8J0	4822 122 40589	0.047μF
C8J1	4822 126 10513	47pF
C8J2	4822 122 40589	0.047μF
C8J3	4822 126 10513	47pF
C8J4	4822 124 21894	10μF 16V
C8J5	4822 122 33639	1000pF
C8J6	4822 126 13089	33pF
C8J7	4822 126 13089	33pF
C8J8	4822 124 23053	1μF 50V
C8J9	4822 122 40589	0.047μF
C8K0	4822 122 40586	0.01μF
C8K1	4822 122 40586	0.01μF
C8K2	4822 122 40586	0.01μF
C8K3	4822 124 23056	47μF 16V
C8K4	4822 122 40586	0.01μF
C8K5	4822 124 23056	47μF 16V
C8K6	4822 122 40586	0.01μF
C8K7	4822 122 33639	1000pF
C8K9	4822 122 40586	0.01μF
C8L0	4822 124 23053	1μF 50V
C8L1	4822 126 10363	68pF
C8L3	4822 126 10363	68pF
C8L4	5322 122 32311	470pF
C8L6	4822 122 10367	150pF
C8M1	4822 122 40586	0.01μF
C8M2	4822 122 40586	0.01μF
C8M3	4822 122 40586	0.01μF
C8M4	4822 122 40586	0.01μF
C8M5	4822 124 23056	47μF 16V
C8M6	4822 122 40586	0.01μF
C8M7	4822 122 33639	1000pF
C8M8	4822 124 23056	47μF 16V
C8M9	4822 122 40586	0.01μF
C8N0	4822 124 23053	1μF 50V
C8N1	5322 122 32335	330pF
C8N2	4822 126 10363	68pF
C8N3	5322 122 32335	330pF
C8N4	4822 126 10363	68pF
C8N5	4822 124 23053	1μF 50V
C8N6	4822 126 10363	68pF

Head Amplifier (HI-FI)

IC's

IC87	4822 209 62173	BA7740S
IC88	4822 209 30648	BA7274S HEAD AMP IC

CONNECTORS

J8H1	4822 267 40907	12PIN
J8H2	4822 265 41294	FFC 13PIN
J8H3	4822 265 31167	4PIN

COILS

L8H1	4822 157 60444	100µH
L8H2	4822 157 60444	100µH
L8H3	4822 157 60444	100µH
L8H4	4822 157 60454	68µH
L8H5	4822 157 60451	220µH
L8M1	4822 157 62252	22µH
L8M2	4822 157 62252	22µH

RESISTORS

R8H1	4822 116 52228	680 Ω
R8H2	4822 116 52228	680 Ω
R8H3	4822 116 52228	680 Ω
R8H4	4822 116 52228	680 Ω
R8H5	4822 116 52224	470 Ω
R8H6	4822 116 52224	470 Ω
R8H7	4822 116 52195	47 Ω
R8H8	4822 116 52195	47 Ω
R8H9	4822 116 52258	220 kΩ
R8J0	4822 116 52257	22 kΩ
R8J1	4822 116 52243	1.5 kΩ
R8J2	4822 116 52243	1.5 kΩ
R8J3	4822 116 52228	680 Ω
R8J4	4822 050 11002	1 kΩ
R8J5	4822 116 52243	1.5 kΩ
R8J6	4822 116 52256	2.2 kΩ
R8J7	4822 116 52256	2.2 kΩ
R8J9	4822 116 52233	10 kΩ
R8K0	4822 116 52243	1.5 kΩ
R8K1	4822 116 52219	330 Ω
R8M1	4822 116 52271	33 kΩ
R8M2	4822 116 52257	22 kΩ
R8M3	4822 050 11002	1 kΩ
R8M4	4822 116 52233	10 kΩ
R8M5	4822 116 52233	10 kΩ
R8M6	4822 116 52233	10 kΩ
R8M7	4822 116 52271	33 kΩ
R8M8	4822 116 52243	1.5 kΩ
R8M9	4822 116 52243	1.5 kΩ
R8N0	4822 116 52243	1.5 kΩ
R8N1	4822 116 52243	1.5 kΩ
R8N2	4822 050 11002	1 kΩ
R8N3	4822 116 52176	10 Ω

A/V Selector

CAPACITORS

C451	4822 122 33639	1000pF (HI-FI W/O CHANAL+)
C452	4822 122 33639	1000pF (W/O CHANAL +)
C453	4822 122 33639	1000pF
C454	4822 122 33639	1000pF
C455	4822 122 40586	10000pF
C456	4822 124 21894	10µF 16V
C457	4822 124 21894	10µF 16V
C458	4822 124 21894	10µF 16V (CHANAL +)
C459	4822 124 21894	10µF 16V (CHANAL +)
C460	4822 124 21894	10µF 16V (CHANAL +)
C461	4822 124 21894	10µF 16V (CHANAL +)
C462	4822 124 21894	10µF 16V (CHANAL +)
C463	4822 124 21894	10µF 16V (CHANAL +)
C464	4822 124 21894	10µF 16V (CHANAL +)
C465	4822 124 21894	10µF 16V (CHANAL +)
C466	4822 124 21894	10µF 16V (CHANAL +)
C467	4822 124 21894	10µF 16V (CHANAL +)
C468	4822 124 21894	10µF 16V (CHANAL +)
C469	4822 124 21894	10µF 16V (CHANAL +)
C470	4822 124 21894	10µF 16V (CHANAL +)
C471	4822 124 80087	220µF 6.3V (CHANAL +)
C472	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C473	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C474	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C475	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C476	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C477	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C478	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C479	4822 124 21894	10µF 16V (CHANAL +)
C480	4822 124 21894	10µF 16V (CHANAL +)
C481	4822 124 21894	10µF 16V (CHANAL +)
C482	4822 124 21894	10µF 16V (CHANAL +)
C483	4822 124 21894	10µF 16V (CHANAL +)
C484	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C485	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C486	4822 124 21894	10µF 16V (CHANAL + and MONO)
C487	4822 124 21894	10µF 16V (CHANAL + and MONO)
C488	4822 124 21894	10µF 16V (CHANAL + and MONO)
C489	4822 124 21894	10µF 16V (CHANAL + and MONO)
C490	4822 124 21894	10µF 16V (CHANAL + and MONO)
C491	4822 124 21894	10µF 16V
C492	4822 124 21894	10µF 16V
C493	4822 124 21894	10µF 16V
C494	4822 124 21894	10µF 16V
C495	4822 124 21894	10µF 16V
C496	4822 124 23053	1µF 50V (CHANAL +)
C497	4822 124 23773	10µF 16V (HI-FI)
C498	4822 124 23773	10µF 16V (HI-FI)
C499	4822 124 21894	10µF 16V (CHANAL +)
C4A0	4822 122 33639	1000pF (CHANAL +)
C4A1	4822 122 33639	1000pF (CHANAL +)
C4A2	4822 122 33639	1000pF (CHANAL +)
C4A3	4822 122 33639	1000pF (CHANAL +)
C4A4	4822 122 33639	1000pF (CHANAL +)
C4A5	4822 122 33639	1000pF (CHANAL +)
C4A6	4822 122 33639	1000pF (CHANAL +)
C4A7	4822 122 33639	1000pF (CHANAL +)
C4F2	4822 122 33794	3300pF (HI-FI)
C4F2	4822 122 33639	1000pF (MONO)
C4F3	4822 122 33794	3300pF (HI-FI)
C4F4	4822 124 21894	10µF 16V (HI-FI)
C4F5	4822 124 21894	10µF 16V (HI-FI)
C4H1	4822 124 21894	10µF 16V (CHANAL +)
C4H2	4822 124 21894	10µF 16V (HI-FI CHANAL +)
C4H3	5322 122 32331	1000pF 50V (MONO CHANAL +)
C4H4	4822 122 31173	220pF (HI-FI)
C4J1	4822 124 21894	10µF 16V (CHANAL +)
C4J2	4822 124 21894	10µF 16V (MV633)
C4J3	4822 122 31349	68pF (MULTI)
U4M4	4822 124 21894	10µF 16V (HI-FI CHANAL +)

DIODES

D451	4822 130 32778	1SS133 (MONO)
D452	4822 130 32778	1SS133 (MONO)
D453	4822 130 32778	1SS133 (CHANAL +)
D4A0	4822 130 32778	1SS133 (CHANAL +)
Z451	4822 130 80273	8.2V ZENER (W/O CHANAL +)
Z452	4822 130 80273	8.2V ZENER (W/O CHANAL +)
Z453	4822 130 80273	8.2V ZENER (HI-FI W/O CHANAL +)
Z454	4822 130 80273	8.2V ZENER (HI-FI W/O CHANAL +)
Z455	4822 130 80273	8.2V ZENER (W/O CHANAL +)
Z456	4822 130 80273	8.2V ZENER (W/O CHANAL +)
Z457	4822 130 80273	8.2V ZENER (W/O VR663)
Z458	4822 130 80273	8.2V ZENER (W/O VR663)
Z459	4822 130 80273	8.2V ZENER
Z460	4822 130 80273	8.2V ZENER
Z461	4822 130 80273	8.2V ZENER (W/O MV433)
Z462	4822 130 80273	8.2V ZENER (W/O MV433)
Z4A0	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A1	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A2	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A3	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A4	4822 130 80273	8.2V ZENER (CHANAL +)

A/V Selector

Z4A5	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A6	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A7	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A8	4822 130 80273	8.2V ZENER (CHANAL +)
Z4A9	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C0	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C1	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C2	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C3	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C4	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C5	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C6	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C7	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C8	4822 130 80273	8.2V ZENER (CHANAL +)
Z4C9	4822 130 80273	8.2V ZENER (CHANAL +)
Z4D0	4822 130 80273	8.2V ZENER (CHANAL +)
Z4D1	4822 130 80273	8.2V ZENER (CHANAL +)
Z4D2	4822 130 80273	8.2V ZENER (CHANAL +)
Z4D3	4822 130 80273	8.2V ZENER (CHANAL +)
Z4F6	4822 130 80273	8.2V ZENER
Z4F7	4822 130 80273	8.2V ZENER
Z4F8	4822 130 80273	8.2V ZENER (HI-FI)
Z4F9	4822 130 80273	8.2V ZENER (HI-FI)
Z4H1	4822 130 80273	8.2V ZENER
Z4H2	4822 130 80273	8.2V ZENER

IC's

IC4A	4822 209 33035	LA7220 (CHANAL +)
IC4C	4822 209 33035	LA7220 (CHANAL +)
IC4D	4822 209 33035	LA7220 (HI-FI CHANAL +)
IC4E	4822 209 33035	LA7220 (CHANAL +)
IC4F	4822 209 60079	LA7222 ANALOG SW (CHANAL + and MONO)
IC4H	4822 209 60079	LA7222 ANALOG SW

CONNECTORS

J451	4822 265 30562	RCA PIN JACK 4PIN (MONO W/O CHANAL +)
J451	4822 290 81339	RCA PIN JACK 6PIN (HI-FI W/O CHANAL +)
J453	4822 265 51287	20PIN
J4A1	4822 290 61199	M1740-A EURO (CHANAL +)
J4A2	4822 290 61199	M1740-A EURO (CHANAL +)
J4F1	4822 290 61197	02P0713 RCA 2PIN (MONO)
J4F1	4822 290 61198	RCA 3PIN (PAL HI-FI W/O VR743)
J4F1	4822 290 81642	RCA 3PIN GOLD (MULTI HI-FI, VR743)
J4F3	4822 265 30669	5PIN (HI-FI)
J4F4	4822 265 30777	CONNECTIVE 3PIN (MONO)

COILS

L451	4822 157 62252	22µH
L452	4822 157 62252	22µH
L453	4822 157 60444	100µH (CHANAL +)

TRANSISTORS

Q451	4822 130 63242	2SB810 RANK (CHANAL +)
Q452	4822 130 42594	DTC144ES/UN4213 (CHANAL +)
Q453	4822 130 60839	2SC2458 (Y OR GR) (CHANAL +)
Q454	4822 130 60107	2SA1048 (Y OR GR) (CHANAL +)
Q455	4822 130 60839	2SC2458 (Y OR GR) (CHANAL +)
Q4K1	4822 130 42682	DTA144ES/UN4113 (CHANAL +)
Q4K2	4822 130 42682	DTA144ES/UN4113 (CHANAL +)
Q4K3	4822 130 42682	DTA144ES/UN4113 (CHANAL +)

RESISTORS

R451	4822 111 41355	75 Ω (W/O CHANAL +)
R452	4822 116 52269	3.3 kΩ (HI-FI W/O CHANAL +)
R453	4822 116 52224	470 Ω (VR663)
R453	4822 116 52269	3.3 kΩ (MULTI HI-FI W/O CHANAL +)
R453	4822 116 52284	47 kΩ (VR743)
R454	4822 116 52224	470 Ω (W/O VR663)
R455	4822 116 52284	47 kΩ (W/O VR663)
R456	4822 116 52224	470 Ω
R457	4822 116 52284	47 kΩ
R458	4822 116 52219	330 Ω
R459	4822 116 52224	470 Ω
R460	4822 116 52234	100 kΩ
R461	4822 116 52233	10 kΩ (CHANAL +)
R462	4822 116 52233	10 kΩ (CHANAL +)
R463	4822 116 52233	10 kΩ (CHANAL +)
R464	4822 116 52233	10 kΩ (CHANAL +)
R465	4822 052 10101	100 Ω (CHANAL +)
R466	4822 116 52233	10 kΩ (CHANAL +)
R467	4822 116 52233	10 kΩ (CHANAL +)
R468	4822 116 52233	10 kΩ (CHANAL +)
R469	4822 116 52233	10 kΩ (CHANAL +)
R470	4822 052 10101	100 Ω (CHANAL +)
R471	4822 116 52233	10 kΩ (HI-FI CHANAL +)
R472	4822 116 52233	10 kΩ (HI-FI CHANAL +)
R473	4822 116 52233	10 kΩ (HI-FI CHANAL +)
R474	4822 116 52233	10 kΩ (HI-FI CHANAL +)

A/V Selector

R475	4822 116 52233	10 kΩ (HI-FI CHANAL +)
R476	4822 052 10101	100 Ω (HI-FI CHANAL +)
R477	4822 116 52233	10 kΩ (CHANAL +)
R478	4822 116 52233	10 kΩ (CHANAL +)
R479	4822 116 52233	10 kΩ (CHANAL +)
R480	4822 052 10101	100 Ω (CHANAL +)
R481	4822 052 10101	100 Ω (CHANAL + and MONO)
R482	4822 052 10101	100 Ω
R483	4822 050 11002	1 kΩ (CHANAL +)
R484	4822 050 11002	1 kΩ (CHANAL +)
R485	4822 116 52284	47 kΩ (MONO)
R486	4822 116 52284	47 kΩ (MONO)
R488	4822 116 52297	68 kΩ (HI-FI CHANAL +)
R489	4822 116 52297	68 kΩ (HI-FI CHANAL +)
R490	4822 050 11002	1 kΩ (CHANAL +)
R491	4822 116 52233	10 kΩ (CHANAL +)
R492	4822 050 11002	1 kΩ (CHANAL +)
R493	4822 116 52233	10 kΩ (CHANAL +)
R494	4822 050 11002	1 kΩ (CHANAL +)
R495	4822 050 11002	1 kΩ (CHANAL +)
R496	4822 116 52233	10 kΩ (CHANAL +)
R498	4822 111 41355	75 Ω
R4A0	4822 116 52284	47 kΩ (CHANAL +)
R4A1	4822 116 52224	470 Ω (CHANAL +)
R4A2	4822 050 11002	1 kΩ (MONO CHANAL +)
R4A3	4822 116 52284	47 kΩ (CHANAL +)
R4A4	4822 116 52224	470 Ω (CHANAL +)
R4A5	4822 050 11002	1 kΩ (MONO CHANAL +)
R4A6	4822 052 10101	100 Ω (CHANAL +)
R4A7	4822 116 52224	470 Ω (CHANAL +)
R4A8	4822 116 52284	47 kΩ (CHANAL +)
R4A9	4822 050 11002	1 kΩ (MONO CHANAL +)
R4C0	4822 116 52284	47 kΩ (CHANAL +)
R4C1	4822 116 52224	470 Ω (CHANAL +)
R4C2	4822 050 11002	1 kΩ (MONO CHANAL +)
R4C3	4822 111 41355	75 Ω (CHANAL +)
R4C4	4822 111 41355	75 Ω (CHANAL +)
R4C5	4822 111 41355	75 Ω (CHANAL +)
R4C6	4822 111 41355	75 Ω (CHANAL +)
R4C7	4822 116 52233	10 kΩ (CHANAL +)
R4F3	4822 116 52269	3.3 kΩ (HI-FI)
R4F3	4822 116 52224	470 Ω (MONO)
R4F4	4822 116 52296	6.8 kΩ (HI-FI)
R4F5	4822 116 52269	3.3 kΩ (HI-FI)
R4F6	4822 116 52296	6.8 kΩ (HI-FI)
R4F7	4822 111 41355	75 Ω
R4H1	4822 116 52234	100 kΩ (HI-FI CHANAL +)
R4H2	4822 116 52234	100 kΩ (HI-FI CHANAL +)
R4H3	4822 116 52234	100 kΩ (HI-FI CHANAL +)
R4H4	4822 116 52271	33 kΩ (HI-FI CHANAL +)
R4K1	4822 116 52283	4.7 kΩ (CHANAL +)
R4K2	4822 116 52283	4.7 kΩ (CHANAL +)
R4K3	4822 116 52283	4.7 kΩ (CHANAL +)
C4H0	4822 116 52297	68 kΩ (HI-FI CHANAL +)
U496	4822 116 52297	68 kΩ (HI-FI CHANAL +)
U4F3	4822 116 52271	33 kΩ (HI-FI CHANAL +)

RF - MODULATORS

E451	4822 691 20756	MULTI RF MOD 36CH (MULTI W/O VR763/55)
E451	4822 214 52172	MULTI RF MOD 39CH (VR763/55)
E451	4822 214 60116	AUS PAL BG (VR743)
E451	4822 214 60123	EUR PAL BG (MV633/02/08, MV433)
E451	4822 214 32966	EUR PAL I (MV633/05)
E451	4822 214 60122	EUR PAL BG/I (MV633/16)

NTSC Detector (MULTI)

CAPACITORS

C8T1	4822 122 40588	0.022µF
C8T2	4822 122 40586	0.01µF
C8T3	4822 124 21894	10µF 16V
C8T4	4822 126 11726	2200pF
C8T5	4822 124 23057	4.7µF 50V
C8T6	5322 122 32265	100pF 50V
C8T7	4822 122 33714	0.1µF

IC

IC8T	4822 209 33137	LA7950

TRANSISTORS

Q8T1	4822 130 42594	DTC144ES/UN4213
Q8T2	4822 130 42682	DTA144ES/UN4113

RESISTORS

R8T0	4822 052 10109	10 Ω
R8T1	4822 116 52233	10 kΩ
R8T2	4822 116 52233	10 kΩ
R8T3	4822 116 52258	220 kΩ
R8T4	4822 050 11002	1 kΩ
R8T5	4822 116 52298	680 kΩ

NICAM

CAPACITORS

C951	4822 124 23056	47µF 16V
C953	4822 124 23056	47µF 16V
C955	4822 122 33639	1000pF
C956	4822 122 40586	0.01µF (B/G/I, I)
C957	4822 122 40586	0.01µF (B/G/I, I)
C959	4822 122 40586	0.01µF (B/G/I, B/G)
C960	4822 122 40586	0.01µF (B/G/I, B/G)
C961	4822 121 42868	0.22µF
C962	4822 126 11726	2200pF
C963	4822 124 23054	0.47µF 50V
C964	4822 122 40586	0.01µF
C965	4822 124 23056	47µF 16V
C966	4822 122 40586	0.01µF
C967	4822 124 23056	47µF 16V
C968	4822 122 40586	0.01µF
C969	4822 124 21894	10µF 16V (B/G/I, I)
C970	4822 122 40586	0.01µF (B/G/I, I)
C971	4822 122 40586	0.01µF (B/G/I, I)
C972	4822 122 40586	0.01µF (B/G/I, I)
C973	4822 124 21894	10µF 16V (B/G/I, B/G)
C974	4822 122 40586	0.01µF (B/G/I, B/G)
C975	4822 122 40586	0.01µF (B/G/I, B/G)
C976	4822 122 40586	0.01µF (B/G/I, B/G)
C977	4822 124 23056	47µF 16V
C978	4822 122 40586	0.01µF (B/G/I, I)
C979	4822 122 40586	0.01µF (B/G/I, B/G)
C980	4822 124 21894	10µF 16V
C981	4822 124 21894	10µF 16V
C982	4822 124 23053	1µF 50V
C983	4822 122 33792	10pF 50V
C984	4822 124 23773	10µF 16V B. P.
C985	4822 124 21894	10µF 16V
C986	4822 124 23053	1µF 50V
C987	4822 122 33792	10pF 50V
C988	4822 124 23773	10µF 16V B. P.
C989	4822 124 21894	10µF 16V
C990	4822 124 21894	10µF 16V
C9C0	5322 122 34098	0.01µF
C9C1	4822 122 32843	0.22µF
C9C2	4822 122 32843	0.22µF
C9C3	5322 122 32452	47pF
C9C4	5322 122 32448	10pF
C9C5	4822 122 33709	3pF
C9C6	4822 122 33709	3pF
C9C7	5322 122 34098	0.01µF
C9C8	4822 124 23127	0.47µF
C9D0	4822 122 33714	0.1µF
C9D1	4822 122 32669	0.047µF
C9D2	4822 122 32669	0.047µF
C9D3	4822 124 23127	0.47µF

NICAM

C9D5	5322 122 34098	0.01µF
C9D6	4822 122 33714	0.1µF
C9D7	4822 122 33714	0.1µF
C9D8	4822 122 33714	0.1µF
C9D9	5322 122 32531	100pF
C9E0	5322 122 32531	100pF
C9E1	5322 122 32531	100pF
C9E2	5322 122 34098	0.01µF
C9F1	4822 124 41842	47µF 16V
C9F2	5322 122 34098	0.01µF
C9F3	4822 124 41842	47µF 16V
C9F4	4822 124 11074	10µF 16V
C9F5	4822 122 33891	3300pF
C9F6	4822 126 10147	680pF
C9F7	5322 122 33538	150pF
C9F8	4822 124 11074	10µF 16V
C9F9	4822 122 33127	2200pF
C9H0	4822 124 11074	10µF 16V
C9H1	4822 124 11074	10µF 16V
C9H2	4822 122 33891	3300pF
C9H3	4822 126 10147	680pF
C9H4	5322 122 33538	150pF
C9H5	4822 124 11074	10µF 16V
C9H6	4822 122 33127	2200pF
C9H7	4822 124 11074	10µF 16V
C9K1	4822 122 33514	68pF (B/G/I, I)
C9K2	5322 122 32658	22pF (B/G/I, I)
C9K3	4822 122 33514	69pF (B/G/I, B/G)
C9K4	5322 122 32659	33pF (B/G/I, B/G)
C9K5	5322 122 34098	0.01µF (B/G/I)
C9K6	5322 122 32452	47pF (B/G/I, I)
C9K6	4822 122 33135	220pF (B/G)
C9K7	5322 122 32659	33pF (B/G/I, I)
C9K7	5322 122 32448	10pF(B/G)
C9K8	5322 122 32452	47pF (B/G/I, I)
C9K8	4822 122 33135	220pF (B/G)
C9K9	5322 122 32659	33pF (B/G/I, I)
C9K9	5322 122 32448	10pF (B/G)
C9L0	5322 122 33538	150pF (B/G/I)
C9L1	5322 122 33538	150pF (B/G/I)

DIODES

D951	4822 130 32778	1SS133
D952	4822 130 32778	1SS133

FILTERS

FL95	4822 242 81439	SAF32.3MDE70Z (B/G/I, I)
FL96	4822 242 81441	SAF33.0MDA70Z (B/G/I, B/G)
FL97	4822 153 70063	6.552MHZ-BPF (B/G/I, I)
FL98	4822 153 70062	5.85MHZ-BPF (B/G/I, B/G)

IC's

IC95	4822 209 71946	LA7530N
IC96	4822 209 80401	NJM4558D
IC9C	4822 209 32253	TB1204F NICAM-DECODER
IC9D	4822 209 32254	TA2009F LPF-AMP.
IC9E	4822 209 83368	4053 (B/G/I)

CONNECTOR

J9C1	4822 267 31742	PLUG 16PIN

COILS

L951	4822 157 62252	22µH
L953	4822 157 62252	22µH
L954	4822 157 62252	22µH
L955	4822 157 62266	10µH ±5% (B/G/I, I)
L956	4822 157 62266	10µH ±5% (B/G/I, B/G)
L957	4822 157 70461	3.3µH
L958	4822 157 62252	22µH ±5% (B/G/I, I)
L959	4822 157 62252	22µH ±5% (B/G/I, B/G)
L960	4822 157 62252	22µH ±5% (B/G/I, I)
L962	4822 157 62252	22µH
L963	4822 157 70461	3.3µH ±10% (B/G/I, I)
L964	4822 157 70461	3.3µH ±10% (B/G/I, B/G)
L965	4822 157 62266	10µH (B/G/I, I)
L9C1	4822 157 53875	22µH (B/G/I)
L9C2	4822 157 53875	22µH
L9C3	4822 157 63426	1mH
L9C4	4822 157 63426	1mH
T951	4822 157 70462	HK-2086 LLD-COIL

TRANSISTORS

Q951	4822 130 61486	2SC2058S (P OR Q)
Q952	4822 130 61486	2SC2058S (P OR Q) (B/G/I, I)
Q953	4822 130 60588	DTC114ES/UN4211 (B/G/I)
Q954	4822 130 61486	2SC2058S (P OR Q) (B/G/I, B/G)
Q955	4822 130 60588	DTC114ES/UN4211 (B/G/I)
Q956	4822 130 61486	2SC2058S (P OR Q)
Q966	4822 130 60766	DTA114ES/UN4111 (B/G/I)
Q967	4822 130 42594	DTC144ES/UN4213 (B/G/I)
Q968	4822 130 61486	2SC2058S (P OR Q) (B/G/I, I)
Q969	4822 130 61486	2SC2058S (P OR Q) (B/G/I, I)
Q970	4822 130 61486	2SC2058S (P OR Q) (B/G/I, B/G)
Q971	4822 130 61486	2SC2058S (P OR Q) (B/G/I, B/G)
Q972	4822 130 61486	2SC2058S (P OR Q) (B/G/I, B/G)

Q973	4822 130 61486	2SC2058S (P OR Q) (B/G/I, I)
Q974	4822 130 42594	DTC144ES/UN4213 (B/G/I, I)
Q975	4822 130 42594	DTC144ES/UN4213 (B/G/I, I)
Q976	4822 130 42594	DTC144ES/UN4213 (B/G/I, I)
Q9C1	4822 130 43398	2SC2712(G)
Q9C2	4822 130 43398	2SC2712(G)
Q9C3	4822 130 43398	2SC2712(G)
Q9D1	4822 130 61884	RN1404 (B/G/I)
Q9D2	4822 130 61884	RN1404 (B/G/I)
Q9D3	4822 130 61884	RN1404 (B/G/I)

RESISTORS

R951	4822 116 52233	10 kΩ
R952	4822 116 52296	6.8 kΩ
R953	4822 116 52176	10 Ω
R954	4822 116 52243	1.5 kΩ
R955	4822 116 52228	680 Ω (B/G/I, I)
R956	4822 116 52176	10 Ω (B/G/I, I)
R957	4822 116 52176	10 Ω (B/G/I, I)
R958	4822 116 52219	330 Ω (B/G/I, I)
R959	4822 116 52269	3.3 kΩ (B/G/I)
R963	4822 116 52228	680 Ω (B/G/I, B/G)
R965	4822 116 52186	22 Ω (B/G/I, B/G)
R966	4822 116 52219	330 Ω (B/G/I, B/G)
R967	4822 116 52269	3.3 kΩ (B/G/I)
R968	4822 116 52269	3.3 kΩ (B/G/I)
R970	4822 116 52243	1.5 kΩ
R971	4822 116 52256	2.2 kΩ
R972	4822 116 52283	4.7 kΩ
R973	4822 116 52256	2.2 kΩ
R974	4822 116 52176	10 Ω
R975	4822 116 52224	470 Ω
R980	4822 116 52243	1.5 kΩ (B/G/I, I)
R981	4822 116 52256	2.2 kΩ (B/G/I, I)
R982	4822 116 52233	10 kΩ (B/G/I, I)
R983	4822 116 52283	4.7 kΩ (B/G/I, I)
R984	4822 050 11002	1 kΩ (B/G/I, I)
R985	4822 116 52175	100 Ω (B/G/I, I)
R987	4822 116 52186	22 Ω (B/G/I, I)
R988	4822 116 52243	1.5 kΩ (B/G/I, B/G)
R989	4822 116 52269	3.3 kΩ (B/G/I, B/G)
R990	4822 116 52233	10 kΩ (B/G/I, B/G)
R991	4822 116 52283	4.7 kΩ (B/G/I, B/G)
R992	4822 050 11002	1 kΩ (B/G/I, B/G)
R993	4822 116 52219	330 Ω (B/G/I, B/G)
R994	4822 050 24708	4.7 Ω (B/G/I, B/G)
R995	4822 116 52175	100 Ω (B/G/I, B/G)
R996	4822 116 52233	10 kΩ (B/G/I, B/G)
R997	4822 116 52233	10 kΩ (B/G/I, B/G)
R998	4822 116 52296	6.8 kΩ
R999	4822 116 52244	15 kΩ (B/G/I, I)
R9A0	4822 116 52296	6.8 kΩ (B/G/I)
R9A1	4822 116 52219	330 Ω (B/G/I, I)
R9A2	4822 116 52296	6.8 kΩ (I)
R9C1	4822 051 30333	33 kΩ
R9C2	4822 051 30224	220 kΩ
R9C3	4822 051 30684	680 Ω
R9C4	4822 051 30471	470 Ω
R9C5	4822 051 30224	220 kΩ
R9C6	4822 051 30333	33 kΩ
R9C7	4822 051 30224	220 kΩ
R9C8	4822 051 30333	33 kΩ
R9C9	4822 051 30101	100 Ω
R9D0	4822 051 30101	100 Ω
R9D1	4822 051 30101	100 Ω
R9E1	4822 051 30473	47 kΩ
R9E2	4822 051 30334	330 kΩ
R9E3	4822 051 30103	10 kΩ
R9E4	4822 051 30103	10 kΩ
R9E5	4822 116 82487	0 Ω
R9E6	4822 051 30472	4.7 kΩ
R9E7	4822 051 30103	10 kΩ
R9E8	4822 051 30229	22 Ω
R9E9	4822 051 30473	47 kΩ
R9F0	4822 051 30334	330 kΩ
R9F1	4822 051 30103	10 kΩ
R9F2	4822 051 30103	10 kΩ
R9F3	4822 116 82487	0 Ω
R9F4	4822 051 30472	4.7 kΩ
R9F5	4822 051 30103	10 kΩ
R9F6	4822 051 30229	22 Ω
R9K1	4822 051 30222	2.2 kΩ (B/G/I, I)
R9K2	4822 051 30222	2.2 kΩ (B/G/I, B/G)
R9K3	4822 100 11605	10 kΩ TRIMMING (B/G/I, I)
R9K4	4822 100 11605	10 kΩ TRIMMING (B/G/I, B/G)
R9K5	4822 051 30332	3.3 kΩ (B/G/I, I)
R9K6	4822 051 30332	3.3 kΩ (B/G/I, B/G)
R9K7	4822 051 30223	22 kΩ (B/G/I, I)
R9K8	4822 051 30223	22 kΩ (B/G/I, B/G)
R9K9	4822 111 90913	33 kΩ (B/G/I)
R9L0	4822 051 30473	47 kΩ (B/G/I)
R9L1	4822 051 30102	1 kΩ
R9L2	4822 051 30331	330 Ω
R9L3	4822 051 30331	330 Ω
R9L4	4822 051 30103	10 kΩ (B/G/I)
R9M1	4822 116 82487	0 Ω (B/G)
R9M2	4822 116 82487	0 Ω (I)
R9M3	4822 116 90892	0 Ω (B/G, I)
R9M4	4822 116 82487	0 Ω (I)
R9N1	4822 116 82487	0 Ω
R9N2	4822 116 82487	0 Ω
R9N3	4822 116 82487	0 Ω

NICAM

R9N4	4822 111 90892	0 Ω 1/10W
R9N5	4822 111 90892	0 Ω 1/10W
R9N6	4822 116 82487	0 Ω
R9N7	4822 116 82487	0 Ω
R9N8	4822 111 90892	0 Ω 1/10W
R9N9	4822 111 90892	0 Ω
R9P0	4822 111 90892	0 Ω
R9P1	4822 116 82487	0 Ω
R9P2	4822 111 90892	0 Ω 1/10W
R9Q0	4822 052 10101	100 Ω
R9Q1	4822 116 52296	6.8 kΩ
R9Q2	4822 116 52284	47 kΩ (B/G/I, B/G)
R9Q2	4822 116 52257	22 kΩ (I)
R9Q3	4822 116 52283	4.7kΩ (B/G/I)
R9Q3	4822 116 52296	6.8 kΩ (I)
R9Q6	4822 116 52234	100 kΩ
R9Q7	4822 116 52245	150 kΩ
R9R1	4822 116 52283	4.7kΩ (B/G/I)
R9R1	4822 116 52296	6.8 kΩ (I)
R9R2	4822 116 52284	47 kΩ (B/G/I, B/G)
R9R2	4822 116 52257	22 kΩ (I)
R9R3	4822 116 52296	6.8 kΩ
R9R4	4822 116 52234	100 kΩ
R9R5	4822 116 52234	100 kΩ
R9R6	4822 116 52257	22 kΩ (B/G/I)
R9R9	4822 116 52296	6.8 kΩ
R9S0	4822 116 52296	6.8 kΩ
R9S1	4822 116 52257	22 kΩ (I)
R9S2	4822 116 52234	100 kΩ
R9S3	4822 116 52245	150 kΩ

X-TALS

X9C1	4822 242 81445	11.648MHZ
X9C2	4822 242 81443	6.552MHZ (B/G/I, I)
X9C3	4822 242 81442	5.85MHZ (B/G/I, B/G)

NTSC-PAL Conv.(W/O VR743)

CAPACITORS

C8A0	4822 122 40586	0.01μF
C8A2	4822 126 10362	22pF
C8A5	4822 124 23053	1μF 50V
C8A6	4822 122 33794	3300pF
C8A7	4822 122 40586	0.01μF
C8A8	4822 126 10362	22pF
C8A9	4822 126 10513	47pF
C8C0	4822 126 10362	22pF
C8C1	4822 126 10362	22pF
C8C3	4822 124 21894	10μF 16V
C8C4	4822 122 40586	0.01μF (ALL MODEL)
C8C5	4822 122 40586	0.01μF
C8C6	4822 122 40586	0.01μF (ALL MODEL)
C8C7	4822 122 40586	0.01μF (ALL MODEL)
C8C8	4822 122 40586	0.01μF (ALL MODEL)
C8D0	4822 126 13089	33pF

IC

IC82	4822 209 31897	BA7045 NTSC TO PAL

COILS

L8A1	4822 157 62266	10μH
L8A2	4822 157 60458	3.3μH
L8A3	4822 157 60446	33μH
L8A5	4822 157 60444	100μH

TRANSISTORS

Q8A0	4822 130 60839	2SC2458 (Y OR GR)
Q8A1	4822 130 60839	2SC2458 (Y OR GR) (ALL MODEL)
Q8A2	4822 130 42594	DTC144ES/UN4213 (MULTI)
Q8A3	4822 130 60588	DTC114ES/UN4211

RESISTORS

R8A0	4822 050 11002	1 kΩ
R8A1	4822 050 11002	1 kΩ
R8A2	4822 116 52269	3.3 kΩ
R8A3	4822 116 52234	100 kΩ
R8A4	4822 116 52285	470 kΩ
R8A5	4822 116 52245	150 kΩ
R8A6	4822 116 52296	6.8 kΩ
R8A7	4822 050 11002	1 kΩ
R8A8	4822 050 11002	1 kΩ (ALL MODEL)
R8A9	4822 116 52243	1.5 kΩ (VR743)
R8A9	4822 116 52228	680 Ω
R8C0	4822 116 52175	100 Ω
R8C1	4822 116 52284	47 kΩ (ALL MODEL)
R8C2	4822 116 52271	33 kΩ (ALL MODEL)
R8C3	4822 116 52283	4.7 kΩ (ALL MODEL)
R8C4	4822 116 52269	3.3 kΩ
R8C5	4822 116 52233	10 kΩ (MULTI)

Power Supply

CAPACITORS

C101	4822 122 31956	0.001µF
C102	4822 122 31956	0.001µF
C103	4822 121 43363	0.22µF
C104	4822 122 31956	0.001µF
C105	4822 122 31956	0.001µF
C106	4822 121 51422	0.1µF
C115	4822 126 13091	0.047µF
C116	4822 122 33821	150pF
C117	4822 124 23114	82µF 400V
C118	4822 122 40586	0.01µF
C119	4822 122 40586	0.01µF
C120	4822 124 23111	1000µF 16V
C121	4822 124 23111	1000µF 16V
C122	4822 124 41153	220µF 16V
C123	4822 124 22777	10µF 50V
C125	4822 122 32331	1000pF
C126	4822 124 22781	1000µF 25V
C127	4822 124 22781	1000µF 25V
C128	4822 124 22777	10 µF 50V
C133	4822 124 41139	100µF 16V
C134	4822 124 23053	1µF 50V
C135	4822 121 41857	0.01µF
C136	4822 124 80493	1µF 250V
C137	5322 122 32331	1000pF
C138	5322 122 32311	470pF
C139	4822 121 41856	0.022µF
C140	5322 121 42489	0.033µF

DIODES

D101	4822 130 81732	1J4B42 BRIDGE
D104	4822 130 32778	1SS133
D107	4822 130 81244	ERA22-10
D108	4822 130 81728	1GWJ42
D109	4822 130 80528	MA185
D110	4822 130 81249	RU4YX
D111	4822 130 80528	DIODE MA185
D115	4822 130 32778	1SS133
D116	4822 130 32778	1SS133
D117	4822 130 80528	MA185
Z102	4822 130 80132	3.9V ZENER
Z103	4822 130 80273	8.2V ZENER
Z104	4822 130 80091	12V ZENER

FUSES

F101	4822 253 30415	1.6 A 250V BS LISTED
PR01	4822 209 61685	ICP N38

IC's

IC01	4822 130 82875	0N3171 PHOTO UNIT
IC02	4822 209 62759	NJM431 SHUNT REGULATOR

CONNECTORS

J101	4822 265 20359	PLUG 2PIN
J102	4822 256 30329	FUSE CLIP
J103	4822 256 30329	FUSE CLIP
J104	4822 265 41024	PLUG 12PIN
W101	4822 321 11036	AC CORD FOR PAL (W/O VR743)
W101	4822 321 11034	AC CORD FOR PAL AUS (VR743)

COILS

L101	4822 157 70398	22mH
L103	4822 157 70397	22µH
L104	4822 157 70397	22µH
L105	4822 157 70397	22µH

TRANSISTORS

Q102	4822 130 43191	2SC1741(Q OR R)
Q105	4822 130 42254	2SD1275
Q106	4822 130 60588	UN4211
Q107	4822 130 63048	2SK1611

RESISTORS

R101	4822 116 82449	330 kΩ
R113	4822 115 90166	10 Ω 1/4W FUSE
R114	4822 113 90141	220 Ω 1/4W FUSE
R124	4822 116 52283	4.7 kΩ
R127	4822 116 52283	4.7 kΩ
R131	4822 117 10275	47 kΩ
R132	4822 117 10275	47 kΩ
R133	4822 116 52272	330 kΩ
R134	4822 116 52272	330 kΩ
R135	4822 116 52272	330 kΩ
R136	4822 116 52272	330 kΩ
R137	4822 116 52272	330 kΩ
R138	4822 116 52272	330 kΩ
R139	4822 116 52235	1 MΩ
R140	4822 117 10276	0.22 Ω
R141	4822 117 10274	150 Ω
R142	4822 050 11002	1 kΩ
R143	4822 050 11002	1 kΩ

Power Supply

R144	4822 116 52224	470 Ω
R145	4822 116 52211	150 Ω
R146	4822 116 52233	10 kΩ
R151	4822 050 11002	1 kΩ
R153	4822 116 52283	4.7 kΩ
R154	4822 116 52283	4.7 kΩ
R155	4822 116 52195	47 Ω
R156	4822 116 52283	4.7 kΩ
R157	4822 116 52228	680 Ω
R158	4822 117 10158	1 Ω
R159	4822 117 10158	1 Ω

TRANSFORMER

T101	4822 146 21777	POWER TRANSF.

Skew (MULTI)

CAPACITORS

C3A1	4822 124 21894	10μF 16V
C3A2	4822 126 10363	68pF
C3A3	4822 124 21894	10μF 16V
C3A4	4822 124 21894	10μF 16V
C3A5	4822 122 40588	0.022μF
C3A6	4822 126 10362	22pF
C3A7	4822 126 10363	68pF
C3A8	4822 126 10362	22pF
C3A9	4822 124 41139	100μF 16V
C3C1	4822 124 21894	10μF 16V
C3C2	4822 122 40586	0.01μF
C3C3	4822 126 10513	47pF
C3C4	4822 126 10363	68pF
C3C5	4822 122 10367	150pF
C3C6	4822 124 21894	10μF 16V
C3C7	4822 122 40586	0.01μF
C3C8	4822 124 23053	1μF 50V
C3C9	4822 122 40586	0.01μF
C3D0	4822 124 23053	1μF 50V
C3D1	4822 124 23053	1μF 50V

DIODES

D3A1	4822 130 32778	1SS133
D3A2	4822 130 32778	1SS133
D3A3	4822 130 32778	1SS133
D3A4	4822 130 32778	1SS133

IC's

IC3A	4822 209 32861	NJM2234D
IC3C	4822 209 32252	TE8828P

COILS

L3A1	4822 157 60444	100μH
L3A2	4822 157 60444	47μH
L3A3	4822 157 60446	33μH
L3A4	4822 157 60444	100μH
L3A5	4822 157 60444	100μH

TRANSISTORS

Q3A1	4822 130 60107	2SA1048 (Y OR GR)
Q3A2	4822 130 61486	2SC2058S (P OR Q)
Q3A3	4822 130 60107	2SA1048 (Y OR GR)
Q3A4	4822 130 61486	2SC2058S (P OR Q)
Q3A5	4822 130 42682	DTA144ES

Skew (MULTI)

RESISTORS

R3A1	4822 116 52234	100 kΩ
R3A2	4822 050 11002	1 kΩ
R3A3	4822 116 52256	2.2 kΩ
R3A4	4822 100 11386	1 kΩ TRIMMING
R3A6	4822 116 52228	680 Ω
R3A7	4822 116 52215	220 Ω
R3A8	4822 116 52224	470 Ω
R3A9	4822 116 52243	1.5 kΩ
R3C0	4822 116 52228	680 Ω
R3C1	4822 116 52224	470 Ω
R3C2	4822 116 52215	220 Ω
R3C3	4822 116 52257	22 kΩ
R3C4	4822 116 52257	22 kΩ
R3C5	4822 050 11002	1 kΩ
R3C6	4822 116 52256	2.2 kΩ
R3C7	4822 116 52215	220 Ω
R3D0	4822 116 52283	4.7 kΩ
R3D1	4822 116 52195	47 Ω
R3D2	4822 116 52233	10 kΩ

X-TAL

X3A1	4822 242 81446	13.5725MHZ

Secam Detector (MULTI)

CAPACITORS

C8Q1	4822 122 40586	0.01µF
C8Q3	4822 124 21894	10µF 16V
C8Q4	4822 122 33639	1000pF
C8Q6	4822 124 21894	10µF 16V
C8Q7	4822 124 80798	3.3µF 50V
C8Q8	4822 124 80798	3.3µF 50V
C8Q9	4822 124 80087	220µF 6V

DIODES

D8Q2	4822 130 32778	1SS133
D8Q3	4822 130 32778	1SS133
D8Q4	4822 130 32778	1SS133
D8Q5	4822 130 32778	1SS133

IC

IC8Q	4822 209 63155	LA7311

COIL

L8Q1	4822 157 60444	100µH

TRANSISTORS

Q8Q1	4822 130 60839	2SC2458 (Y OR GR)
Q8Q4	4822 130 42682	DTA144ES/UN4113
Q8Q5	4822 130 42682	DTA144ES/UN4113
Q8Q6	4822 130 60766	DTA114ES/UN4111
Q8Q8	4822 130 42594	DTC144ES/UN4213

RESISTORS

R8Q1	4822 116 52244	15 kΩ
R8Q2	4822 116 52296	6.8 kΩ
R8Q3	4822 050 11002	1 kΩ
R8Q7	4822 116 52297	68 kΩ
R8Q8	4822 116 52235	1 MΩ
R8R1	4822 116 52283	4.7 kΩ
R8R3	4822 116 52283	4.7 kΩ
R8R4	4822 050 11002	1 kΩ
R8R5	4822 116 52233	10 kΩ
R8R6	4822 116 52296	6.8 kΩ

Timer - Tuner

CAPACITORS

C6K1	4822 124 90406	FMOH223ZTP16 (MULTI, VR743)
C6K1	4822 124 80799	FMOH473ZTP18 (PAL W/O VR743)
C6K2	4822 124 21894	10µF 16V
C6K3	4822 122 40586	0.01µF
C6K4	4822 122 33639	1000pF
C6K5	4822 122 33639	1000pF
C6K6	4822 126 13089	33pF
C6K7	4822 125 50437	3P-10P TRIMER
C6K8	4822 124 23057	4.7µF 50V
C6K9	4822 122 33795	4700pF (NICAM)

DIODES

D6K1	4822 130 32778	1SS133
D6K4	4822 130 32778	1SS133
D6K5	4822 130 32778	1SS133
D6K7	4822 130 32778	1SS133
D6K8	4822 130 32778	1SS133
D6K9	4822 130 32778	1SS133
D6L0	4822 130 32778	1SS133 (NICAM)

IC's

IC6K	4822 209 33036	TMP87CM70AF
IC6L	4822 209 31923	BR93LC46EEPROM
IC6M	4822 209 30646	S-8054ALB
IC6N	4822 209 30645	S-8053ALR

CONNECTORS

J6K1	4822 265 51319	FFC 36PIN
J6K2	4822 265 41363	8PIN (PAL)
J6K2	4822 267 51338	18PIN (MULTI)

TRANSISTOR

Q6K1	4822 130 60839	2SC2458 (Y OR GR)

RESISTORS

R6K2	4822 116 52284	47 kΩ
R6K3	4822 116 52176	10 Ω
R6K4	4822 116 52175	100 Ω
R6K5	4822 116 52175	100 Ω
R6K6	4822 050 11002	1 kΩ
R6K8	4822 050 11002	1 kΩ
R6K9	4822 116 52284	47 kΩ
R6L0	4822 116 52284	47 kΩ
R6L1	4822 116 52233	10 kΩ
R6L2	4822 116 52233	10 kΩ
R6L3	4822 116 52285	470 kΩ
R6L4	4822 116 52234	100 kΩ
R6L5	4822 116 52233	10 kΩ
R6L6	4822 116 52233	10 kΩ
R6L7	4822 116 52233	10 kΩ
R6L8	4822 116 52233	10 kΩ
R6L9	4822 116 52233	10 kΩ
R6M2	4822 116 52284	47 kΩ
R6M6	4822 116 52269	3.3 kΩ
R6M7	4822 116 52233	10 kΩ (MV633/02/05/16)
R6M8	4822 050 11002	1 kΩ
R6M9	4822 050 11002	1 kΩ
R6N0	4822 050 11002	1 kΩ
R6N3	4822 116 52285	470 kΩ (NICAM)

X-TALS

X6K1	4822 242 72066	CST8.0MHZ
X6K2	4822 242 72236	32.768KHZ

Luminance and Chrominance

CAPACITORS

C301	4822 122 33792	10pF
C302	4822 126 10513	47pF
C303	4822 126 11068	39pF
C304	4822 126 10362	22pF (MULTI)
C305	4822 126 11068	39pF
C306	4822 122 31173	220pF
C307	4822 126 10513	47P
C308	5322 122 32311	470pF
C309	4822 124 23772	1µF 50V B. P.
C310	4822 122 33817	6.8pF
C311	5322 122 32265	100pF
C312	4822 122 33792	10pF
C313	4822 126 10363	68pF
C314	4822 126 10363	68pF
C315	4822 126 10362	22pF
C316	4822 122 40586	0.01µF
C317	4822 124 80798	3.3µF 50V
C318	4822 124 21894	10µF 16V
C319	4822 122 40586	0.01µF
C320	4822 122 40589	0.047µF
C321	4822 124 23053	1µF 50V
C322	4822 122 40589	0.047µF
C323	4822 124 23053	1µF 50V
C324	4822 122 40586	0.01µF
C325	4822 122 40586	0.01µF
C326	4822 122 40588	0.022µF
C327	4822 124 21894	10µF 16V (MULTI)
C329	4822 122 40586	0.01µF
C330	4822 122 40586	0.01µF (MULTI)
C332	4822 124 21894	10µF 16V
C333	4822 122 10367	150pF
C334	5322 122 32265	100pF
C335	4822 126 10363	68pF
C336	4822 124 21894	10µF 16V
C337	4822 122 40586	0.01µF (W/O VR743)
C338	4822 124 23053	1µF 50V
C339	4822 122 40586	0.01µF
C340	4822 124 23772	1µF 50V B. P.
C341	4822 122 40586	0.01µF
C342	4822 124 21894	10µF 16V
C343	4822 126 13089	33pF
C344	4822 122 33817	6.8pF
C345	4822 126 10513	47pF
C346	4822 124 21894	10µF 16V
C347	4822 124 21894	10µF 16V
C348	4822 122 33639	1000pF
C350	4822 124 21894	10µF 16V
C351	4822 124 23056	47µF 16V
C352	4822 122 40586	0.01µF
C353	4822 124 41139	100µF 16V
C354	4822 124 23053	1µF 50V
C355	4822 122 33795	4700pF
C357	4822 122 40586	0.01µF (W/O VR743)
C359	4822 124 21894	10µF 16V
C360	4822 124 21894	10µF 16V
C361	4822 122 40586	0.01µF
C363	4822 122 40589	0.047µF
C364	4822 124 23053	1µF 50V
C365	4822 124 23053	1µF 50V
C366	4822 122 40588	0.022µF
C367	4822 126 10362	22pF 50V
C368	4822 122 33792	10pF (MULTI)
C369	4822 122 31178	680pF 50V (MULTI)
C380	4822 124 21894	10µF 16V
C381	4822 124 21894	10µF 16V
C382	4822 124 23053	1µF 50V
C383	4822 124 21894	10µF 16V
C801	4822 122 40588	0.022µF
C802	4822 122 40586	0.01µF (MULTI)
C803	4822 122 40586	0.01µF
C804	4822 122 40586	0.01µF
C805	4822 122 40586	0.01µF (MULTI)
C806	4822 122 40586	0.01µF (MULTI)
C807	4822 124 21894	10µF 16V
C808	4822 122 40588	0.022µF
C809	4822 122 40586	0.01µF
C810	4822 124 21894	10µF 16V
C812	4822 122 40586	0.01µF (W/O VR743)
C813	4822 122 40586	0.01µF
C814	4822 122 33817	6.8pF
C815	5322 122 32265	100pF
C816	4822 126 10362	22pF
C817	4822 122 40586	0.01µF
C818	4822 122 40586	0.01µF (W/O VR743)
C819	4822 126 10362	22pF
C8D0	4822 126 10512	15pF 50V (MULTI)

DIODES

D301	4822 130 32778	1SS133
D302	4822 130 32778	1SS133
D304	4822 130 32778	1SS133
D305	4822 130 32778	1SS133
D306	4822 130 32778	1SS133 (MULTI)
D307	4822 130 32778	1SS133
D308	4822 130 32778	1SS133
D309	4822 130 32778	1SS133 (W/O VR743)
D310	4822 130 32778	1SS133 (MULTI)
D311	4822 130 32778	1SS133 (W/O VR743)
D312	4822 130 32778	1SS133
D380	4822 130 80273	8.2V ZENER
D383	4822 130 32778	1SS133
D801	4822 130 32778	1SS133
D802	4822 130 32778	1SS133

Luminance and Chrominance

D803	4822 130 32778	1SS133
D804	4822 130 32778	1SS133 (W/O VR743)
D805	4822 130 32778	1SS133
Z380	4822 130 80273	8.2V ZENER

FILTERS

FL81	4822 320 40259	COMB FILTER
FL82	4822 320 40261	COMB-FILTER (MULTI)
FL83	4822 320 40258	COMB FILTER

IC's

IC31	4822 209 30691	LA7391A
IC32	4822 209 33023	LC89925M
IC33	4822 209 31631	NJM7805FA

CONNECTOR

J302	4822 265 61275	HLEM40S-1 40PIN

COILS

L301	4822 157 60446	33µH
L302	4822 157 60454	68µH
L303	4822 157 60444	100µH (MULTI)
L304	4822 157 60444	100µH
L305	4822 157 60444	100µH
L306	4822 157 60444	100µH
L307	4822 157 60447	47µH
L308	4822 157 52252	22µH
L309	4822 157 62252	22µH
L310	4822 157 60458	3.3µH
L311	4822 157 60446	33µH
L801	4822 157 60444	100µH
L802	4822 157 60445	15µH
L803	4822 157 60449	150µH
L804	4822 157 62266	10µH
L805	4822 157 60446	33µH

TRANSISTORS

Q301	4822 130 60107	2SA1048 (Y OR GR)
Q302	4822 130 60588	DTC114ES/UN4211 (MULTI)
Q303	4822 130 60107	2SA1048 (Y OR GR)
Q304	4822 130 42594	DTC144ES UN4213
Q305	4822 130 60839	2SC2458 (Y OR GR)
Q306	4822 130 42682	DTA144ES UN4113
Q307	4822 130 42594	DTC144ES UN4213
Q308	4822 130 42682	DTA144ES/UN4113 (MULTI)
Q309	4822 130 61486	2SC2058S (P OR Q)
Q310	4822 130 61486	2SC2058S (P OR Q) (MULTI)
Q311	4822 130 61486	2SC2058S (P OR Q)
Q312	4822 130 60839	2SC2458 (Y OR GR)
Q313	4822 130 42594	DTC144ES UN4213
Q314	4822 130 42682	DTA144ES/UN4113 (MULTI)
Q315	4822 130 42594	DTC144ES UN4213
Q316	4822 130 60588	DTC114ES/UN4211 (MULTI)
Q317	4822 130 42594	DTC144ES/UN4213 (W/O VR743)
Q380	4822 130 60107	2SA1048 (Y OR GR)
Q381	4822 130 60107	2SA1048 (Y OR GR)
Q382	4822 130 60107	2SA1048 (Y OR GR)
Q383	4822 130 60839	2SC2458 (Y OR GR)
Q384	4822 130 60839	2SC2458 (Y OR GR)
Q385	4822 130 42594	DTC144ES UN4213
Q386	4822 130 60766	DTA114ES UN4111
Q387	4822 130 42594	DTC144ES UN4213
Q388	4822 130 42594	DTC144ES UN4213
Q389	4822 130 42594	DTC144ES UN4213
Q801	4822 130 60839	2SC2458 (Y OR GR)
Q802	4822 130 60839	2SC2458 (Y OR GR)
Q803	4822 130 60839	2SC2458 (Y OR GR) (MULTI)
Q804	4822 130 60839	2SC2458 (Y OR GR)
Q805	4822 130 60839	2SC2458 (Y OR GR) (W/O VR743)
Q806	4822 130 60839	2SC2458 (Y OR GR) (W/O VR743)
Q807	4822 130 60839	2SC2458 (Y OR GR) (W/O VR743)
Q808	4822 130 60839	2SC2458 (Y OR GR)
Q809	4822 130 60107	2SA1048 (Y OR GR)
Q853	4822 130 60588	DTC 114ES/UN4211 (MULTI HI-FI)
Q8A3	4822 130 60588	DTC114ES/UN4211 (MULTI)

RESISTORS

R277	4822 050 11002	1 kΩ (MV633/02/05/16)
R301	4822 116 52283	4.7 kΩ
R302	4822 100 11351	10 kΩ TRIMMING
R303	4822 116 52256	2.2 kΩ
R304	4822 116 52219	330 Ω
R305	4822 116 52256	2.2 kΩ
R306	4822 116 52256	2.2 kΩ
R307	4822 116 52256	2.2 kΩ
R308	4822 100 11372	47 kΩ TRIMMING
R309	4822 116 52269	3.3 kΩ
R310	4822 116 52243	1.5 kΩ
R311	4822 116 52224	470 Ω
R312	4822 116 52283	4.7 kΩ
R313	4822 116 52233	10 kΩ
R314	4822 116 52256	2.2 kΩ
R316	4822 116 52235	1 MΩ
R317	4822 116 52233	10 kΩ

Luminance and Chrominance

R318	4822 116 52297	68 kΩ
R319	4822 050 11002	1 kΩ
R320	4822 050 11002	1 kΩ
R321	4822 050 11002	1 kΩ
R322	4822 116 52256	2.2 kΩ
R323	4822 116 52271	33 kΩ
R324	4822 116 52233	10 kΩ
R325	4822 116 52233	10 kΩ (MULTI)
R326	4822 116 52271	33 kΩ (MULTI)
R327	4822 116 52256	2.2 kΩ (MULTI)
R328	4822 116 52256	2.2 kΩ
R329	4822 116 52215	220 Ω
R330	4822 116 52256	2.2 kΩ
R331	4822 050 11002	1 kΩ
R332	4822 116 52257	22 kΩ
R333	4822 116 52257	22 kΩ
R334	4822 050 11002	1 kΩ
R335	4822 050 11002	1 kΩ
R336	4822 116 52233	10 kΩ
R337	4822 116 52244	15 kΩ
R338	4822 117 10819	15 Ω 2W METAL
R339	4822 116 52271	33 kΩ
R340	4822 116 52233	10 kΩ
R341	4822 100 11351	10 kΩ TRIMMING
R342	4822 116 52271	33 kΩ (MULTI)
R343	4822 116 52296	6.8 kΩ
R344	4822 116 52244	15 kΩ
R345	4822 116 52243	1.5 kΩ (HI-FI)
R345	4822 050 11002	1 kΩ (MONO)
R346	4822 116 52272	330 kΩ
R347	4822 100 11372	47 kΩ TRIMMING
R349	4822 116 52269	3.3 kΩ
R350	4822 116 52233	10 kΩ
R351	4822 116 52257	22 kΩ
R352	4822 116 52233	10 kΩ
R353	4822 050 11002	1 kΩ
R354	4822 116 52257	22 kΩ
R355	4822 116 52233	10 kΩ (MULTI)
R356	4822 116 52233	10 kΩ (W/O VR743)
R357	4822 116 52228	680 Ω
R358	4822 050 11002	1 kΩ (W/O VR743)
R380	4822 116 52233	10 kΩ
R381	4822 116 52243	1.5 kΩ
R382	4822 116 52269	3.3 kΩ
R383	4822 116 52271	33 kΩ
R384	4822 116 52297	68 kΩ
R385	4822 100 11372	47 kΩ TRIMMING
R386	4822 116 52257	22 kΩ
R387	4822 116 52233	10 kΩ
R388	4822 116 52284	47 kΩ
R389	4822 116 52233	10 kΩ
R390	4822 116 52243	1.5 kΩ

R393	4822 116 52257	22 kΩ
R395	4822 116 52233	10 kΩ
R396	4822 116 52284	47 kΩ
R801	4822 116 52219	330 Ω
R802	4822 116 52215	220 Ω (MULTI)
R803	4822 116 52215	220 Ω
R804	4822 116 52243	1.5 kΩ
R805	4822 116 52224	470 Ω (MULTI)
R807	4822 050 11002	1 kΩ (MULTI)
R808	4822 116 52269	3.3 kΩ (MULTI)
R809	4822 116 52244	15 kΩ
R810	4822 116 52284	47 kΩ
R811	4822 116 52228	680 Ω
R812	4822 116 52271	33 kΩ (W/O VR743)
R813	4822 116 52233	10 kΩ (W/O VR743)
R814	4822 116 52284	47 kΩ
R815	4822 050 11002	1 kΩ (W/O VR743)
R816	4822 116 52215	220 Ω
R817	4822 116 52224	470 Ω
R818	4822 116 52228	680 Ω
R819	4822 050 11002	1 kΩ
R820	4822 116 52284	47 kΩ
R821	4822 116 52234	100 kΩ
R822	4822 116 52233	10 kΩ
R823	4822 116 52234	100 kΩ
R824	4822 116 52175	100 Ω
R825	4822 116 52256	2.2 kΩ
R826	4822 116 52243	1.5 kΩ
R827	4822 116 52215	220 Ω
U830	5322 121 42386	0.1µF (MULTI)

X-TALS

X301	4822 242 72951	4.43MHZ
X302	4822 242 81245	3.579545MHZ (MULTI)
X303	4822 242 81444	8.867238MHZ

On Screen Display

CAPACITORS

C3W1	4822 124 23056	47µF 16V (PAL)
C3W1	4822 124 23053	1µF 50V (MULTI)
C3W2	4822 124 23056	47µF 16V
C3W3	4822 122 40586	0.01µF
C3W4	4822 124 23056	47µF 16V
C3W5	4822 122 40586	0.01µF
C3W6	5322 122 32265	100pF
C3W7	4822 126 10362	22pF
C3W8	4822 126 10363	68pF
C3W9	4822 126 10513	47pF
C3X0	4822 126 10362	22pF
C3X1	4822 126 10362	22pF
C3X2	4822 126 10362	22pF
C3X3	4822 126 10363	68pF
C3X4	4822 126 10362	22pF (W/O VR743)
C3X5	4822 126 10362	22pF (W/O VR743)
C3X6	4822 126 10362	22pF
C3X7	4822 126 10362	22pF
C3X8	4822 124 23056	47µF 16V
C3X9	4822 124 80087	220µF 6V
C3Y0	4822 124 80087	220µF 6V
C3Y1	4822 124 23056	47µF 16V
C3Y2	4822 126 10363	68pF
C3Y3	4822 126 10363	68pF
C3Y4	4822 126 10363	68pF
C3Y5	4822 124 23054	0.47µF 50V (MULTI)
C3Y6	5322 122 32265	100pF 50V (MULTI)

DIODES

D3W1	4822 130 32778	1SS133
D3W2	4822 130 32778	1SS133 (MULTI)

IC's

IC35	4822 209 33026	MB90082 OSD (W/O VR763 and VR773)
IC35	4822 209 33138	MB90082 OSD KANJI (VR763)
IC35	4822 209 33198	MB90082 OSD KANJI H. K. (VR773)
IC36	4822 209 72322	TC74HC00P NAND GATE

COILS

L3W1	4822 157 62252	22µH
L3W2	4822 157 62252	22µH
L3W3	4822 157 71006	15µH
L3W4	4822 116 52215	220 Ω
L3W6	4822 157 60445	15µH (MULTI)

TRANSISTORS

Q3W1	4822 130 60839	2SC2458 (Y OR GR)
Q3W2	4822 130 60839	2SC2458 (Y OR GR)
Q3W3	4822 130 60107	2SA1048 (Y OR GR)
Q3W4	4822 130 60839	2SC2458 (Y OR GR)
Q3W5	4822 130 60107	2SA1048 (Y OR GR)
Q3W6	4822 130 42594	DTC144ES/UN4213 (MULTI)
Q3W7	4822 130 42594	DTC144ES/UN4213 (MULTI)
Q3W8	4822 130 60766	DTA114ES/UN4111 (MULTI)

RESISTORS

R3W1	4822 116 52269	3.3 kΩ
R3W2	4822 050 11002	1 kΩ
R3W3	4822 116 52284	47 kΩ
R3W4	4822 116 52284	47 kΩ
R3W5	4822 116 52257	22 kΩ
R3W6	4822 116 52224	470 Ω
R3W7	4822 116 52215	220 Ω
R3W8	4822 116 52224	470 Ω
R3W9	4822 116 52224	470 Ω
R3X0	4822 116 52224	470 Ω
R3X1	4822 116 52224	470 Ω
R3X2	4822 116 52256	2.2 kΩ
R3X3	4822 116 52283	4.7 kΩ
R3X4	4822 116 52235	1 MΩ (W/O VR743)
R3X5	4822 116 52215	220 Ω (W/O VR743)
R3X6	4822 116 52235	1 MΩ
R3X7	4822 116 52228	680 Ω
R3X8	4822 116 52284	47 kΩ
R3X9	4822 116 52215	220 Ω
R3Y0	4822 116 52233	10 kΩ
R3Y1	4822 116 52233	10 kΩ
R3Y2	4822 116 52233	10 kΩ
R3Y3	4822 116 52284	47 kΩ (MULTI)

X-TALS

X3W1	4822 242 80288	AT49X14.31818MHZ (W/O VR743)
X3W2	4822 242 73903	AT49X17.734475MHZ